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(54) **SET FOR ASSEMBLING A BUILDING LEVEL**

(57) The invention provides a building level set comprising a first support beam (200) extending along a first direction (R1), and having a first and second support surface (220) extending along the first direction (R1). The second support surface (220) is arranged in front of and below the first support surface (210). The set comprises a building level module (300) for supporting on the first support beam (200) and comprising a cover plate (310) supported on a support frame (330). The cover plate (310) protrudes beyond a first support frame side (331) for supporting on the first support surface (210) when the first support frame side (331) is arranged against the first support beam (200). The set comprises a first support profile (400) for connecting to the first support frame side (331), and having a support portion (410) that, when connected, protrudes away from the first support frame side (331) for supporting on the second support surface (220) when the first support frame side (331) is arranged against the first support beam (200).

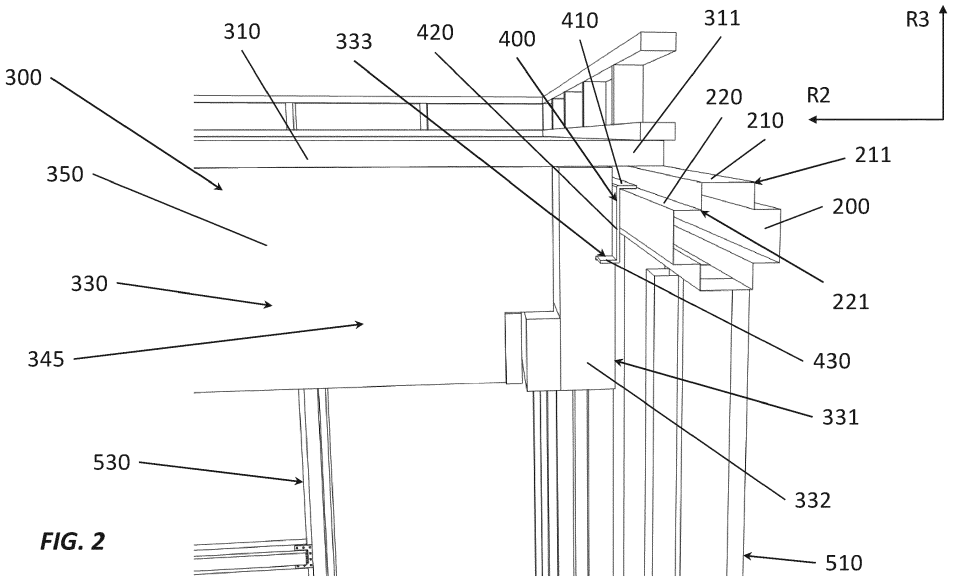

FIG. 2

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Description

Technical field

[0001] The present invention relates to a set for assembling a building level, preferably a horizontal building level, such as a floor or a roof. The present invention also relates to a building level assembled by means of the set of the present invention. The present invention also relates to a method of assembling a building level by means of the set of the present invention.

Background art

[0002] Building levels, such as floors or roofs, known from the prior art are composed of building level modules which are supported at the sides on or against wall sections of the building. Such building level modules comprise a cover plate that is supported on a support frame. The building level modules can be supported at the sides on the wall sections with the bottom of the support frame, but this forms a large interruption in the wall between wall sections stacked on top of each other. The building level modules can also be connected with the sides of the support frame to a wall section, for example by means of screws or support profiles provided on the wall section. This has however the disadvantage that the building level modules are less well supported and that is time consuming to connect the building level modules against the wall sections.

Disclosure of the invention

[0003] It is an aim of the present invention to provide a set for assembling a building level by means of which a well-supported building level can be assembled quickly and easily.

[0004] This aim is achieved according to the invention with a set for assembling a building level, the set showing the technical characteristics of the first independent claim.

[0005] Therefore, the present invention provides a set for assembling a building level. Preferably, the building level is a horizontal building level. Preferably, the building level is a floor or a roof. The set comprises a first support beam extending along a first direction. The first support beam is provided with a first support surface and a second support surface. Both the first support surface and the second support surface extend along the first direction. The second support surface is arranged in front of the first support surface and below the first support surface. Preferably, the second support surface is arranged in front of the first support surface in a second direction perpendicular to the first direction, and the second support surface is arranged below the first support surface in a third direction perpendicular to both the first direction and the second direction. Preferably, the first support surface and the second support surface face upwards in the third direction. The set comprises a building level module for supporting on the first support beam. The building level module comprises a cover plate supported on a support frame. The cover plate extends in the first direction and a second direction. Preferably, the second direction is perpendicular to the first direction. Preferably, the cover plate is rectangular. Preferably, the support frame extends in the first direction and the second direction. Preferably, the support frame extends downwards from the support plate in a third direction perpendicular to both the first direction and the second direction. The support frame has, viewed in the second direction, a first side extending in the first direction. The cover plate comprises a first protruding portion that protrudes beyond the first side of the support frame for supporting on the first support surface of the first support beam when the building level module is arranged with the first side of the support frame against the first support beam. Preferably, the second support surface of the first support beam is thereby arranged first when viewed in the second direction from the first side of the support frame. Preferably, the first support surface and the second support surface of the first support beam are thereby facing upwards in the third direction. Preferably, the first protruding portion of the cover plate extends in the first direction. The set comprises a first support profile configured for being connected to the first side of the support frame. Preferably, the first support profile extends in the first direction. The first support profile has a support portion. The first support profile is configured such that the support portion, when the first support profile is connected to the first side of the support frame, protrudes, preferably in the second direction, away from the first side of the support frame for supporting on the second support surface of the first support beam when the building level module is arranged with the first side of the support frame against the first support beam.

[0006] The set according to the present invention offers the advantage that, in a building level assembled by means of the set, the building level module is supported at the first side of the support frame on the first support beam with both the first protruding portion of the cover plate and the support portion of the first support profile, such that the building level module is well supported on the first support beam in the assembled building level with both the cover plate and the support frame.

[0007] The simple arrangement of the second support surface of the first support beam in front and below the first

support surface of the first support beam, the first protruding portion of the cover plate that protrudes beyond the first side of the support frame for supporting on the first support surface of the first support beam when the building level module is arranged with the first side of the support frame against the first support beam and the first, and the first support profile being configured such that the support portion, when the first support profile is connected to the first side of the support frame, protrudes away from the first side of the support frame for supporting on the second support surface of the first support beam when the building level module is arranged with the first side of the support frame against the first support beam, offers the advantage that the building level can be assembled quickly and easily by arranging the first side of the support frame of the building level module against the first support beam, and thereby supporting the first protruding portion of the cover plate on the first support surface of the first support beam and the support portion of the first support profile, connected to the first side of the support frame, on the second support surface of the first support beam.

[0008] In an embodiment of the set according to the present invention the set comprises a second support beam extending along the first direction. The second support beam is provided with a first support surface and a second support surface. Both the first support surface and the second support surface extend along the first direction. The second support surface is arranged in front of the first support surface and below the first support surface. Preferably, the second support surface is arranged in front of the first support surface in a second direction perpendicular to the first direction, and the second support surface is arranged below the first support surface in a third direction perpendicular to both the first direction and the second direction. Preferably, the first support surface and the second support surface face upwards in the third direction. The support frame of the building level module has, viewed in the second direction, a second side opposite of the first side and extending in the first direction. The cover plate comprises a second protruding portion that protrudes beyond the second side of the support frame for supporting on the first support surface of the second support beam when the building level module is arranged with the second side of the support frame against the second support beam. Preferably, the second support surface of the second support beam is thereby arranged first when viewed in the second direction from the second side of the support frame. Preferably, the first support surface and the second support surface of the second support beam are thereby facing upwards in the third direction. Preferably, the second protruding portion of the cover plate extends in the first direction. The set comprises a second support profile configured for being connected to the second side of the support frame. Preferably, the second support profile extends in the first direction. The second support profile has a support portion. The second support profile is configured such that the support portion, when the second support profile is connected to the second side of the support frame, protrudes, preferably in the second direction, away from the second side of the support frame for supporting on the second support surface of the second support beam when the building level module is arranged with the second side of the support frame against the second support beam.

[0009] This embodiment offers the advantage that, in a building level assembled by means of the set, the building level module is supported at the second side of the support frame on the second support beam with both the second protruding portion of the cover plate and the support portion of the second support profile, such that the building level module is well supported on both the first support beam and the second support beam in the assembled building level with both the cover plate and the support frame at opposing sides of the building level module.

[0010] The simple arrangement of the first support surface and the second support surface of the second support beam, of the second protruding portion of the cover plate and of the support portion of the second support profile offers the advantage that the building level can be assembled quickly and easily by arranging the second side of the support frame of the building level module against the second support beam, and thereby supporting the second protruding portion of the cover plate on the first support surface of the second support beam and the support portion of the second support profile, connected to the second side of the support frame, on the second support surface of the second support beam.

[0011] In an embodiment of the set according to the present invention the set comprises a third support beam extending along the second direction. The third support beam is provided with a first support surface extending along the second direction. Preferably, the third support beam is provided with a second support surface extending along the second direction. Preferably, the second support surface is arranged in front of the first support surface and below the first support surface. Preferably, the second support surface is arranged in front of the first support surface in a second direction perpendicular to the first direction, and the second support surface is arranged below the first support surface in a third direction perpendicular to both the first direction and the second direction. Preferably, the first support surface and, if present, the second support surface face upwards in the third direction. The support frame has, viewed in the first direction, a third side extending in the second direction. The cover plate comprises a third protruding portion that protrudes beyond the third side of the support frame for supporting on the first support surface of the third support beam when the building level module is arranged with the third side of the support frame against the third support beam. Preferably, if present, the second support surface of the third support beam is thereby arranged first when viewed in the first direction from the third side of the support frame. Preferably, the first support surface and, if present, the second support surface of the third support beam are thereby facing upwards in the third direction.

[0012] This embodiment offers the advantage that, in a building level assembled by means of the set, the building level module is supported at the third side of the support frame on the third support beam with the third protruding portion of the cover plate, such that the building level module is further supported on the third support beam in the assembled building level. Hereby, the inventor has found that sufficient further support can be provided by only supporting the third protruding portion of the cover plate on the third support beam, without having to make use of a further support profile, such as the first support profile or the second support profile, at the third side of the support frame and without having to provide the third support beam with a second support surface on which a support portion of such further support profile is to be supported. It is however beneficial if the third support beam is arranged in a similar manner as the first support beam, such that the same type of support beams can be used for assembling the building level.

[0013] The simple arrangement of the first support surface of the third support beam and of the third protruding portion of the cover plate offers the advantage that the building level can be assembled quickly and easily by arranging the third side of the support frame of the building level module against the third support beam, and thereby supporting the third protruding portion of the cover plate on the first support surface of the third support beam.

[0014] In an embodiment of the set according to the present invention the support frame of the building level module comprises a first joist and a second joist. Both the first joist and the second joist extend in the first direction. The first joist and the second joist are arranged, viewed in the second direction, on opposing sides of the support frame. The support frame of the building level module further comprises a plurality of further joists extending in the second direction between the first joist and the second joist. Preferably, the plurality of further joists are spaced apart from each other in the first direction. Preferably, the plurality of further joists are spaced equidistantly apart from each other in the first direction. The first joist forms the first side of the support frame of the building level module. The second joist forms, if present, the second side of the support frame of the building level module. At least one of the outer further joists forms, if present, the third side of the support frame of the building level module.

[0015] In an embodiment of the set according to the present invention the first protruding portion of the cover plate protrudes, preferably in the second direction, beyond the first side of the support frame up to a furthest end of the first support surface of the first support beam for supporting on the first support surface of the first support beam when the building level module is arranged with the first side of the support frame against the first support beam. In combination with the embodiment of the set comprising the second support beam, the second protruding portion of the cover plate protrudes, preferably in the second direction, beyond the second side of the support frame up to a furthest end of the first support surface of the second support beam for supporting on the first support surface of the second support beam when the building level module is arranged with the second side of the support frame against the second support beam. In combination with the embodiment of the set comprising the third support beam, the third protruding portion of the cover plate protrudes, preferably in the first direction, beyond the third side of the support frame up to a furthest end of the first support surface of the third support beam for supporting on the first support surface of the third support beam when the building level module is arranged with the third side of the support frame against the third support beam.

[0016] This embodiment offers the advantage that the first protruding portion, the second protruding portion and the third protruding portion of the cover plate can make use of the entire first support surface of respectively the first support beam, the second support beam and the third support beam for supporting the building level module on the support beams, such that the building level module is firmly supported by the support beams.

[0017] In an embodiment of the set according to the present invention the first support profile is configured such that the support portion, when the first support profile is connected to the first side of the support frame, protrudes, preferably in the second direction, away from the first side of the support frame up to a furthest end of the second support surface of the first support beam for supporting on the second support surface of the first support beam when the building level module is arranged with the first side of the support frame against the first support beam. In combination with the embodiment of the set comprising the second support beam, the second support profile is configured such that the support portion, when the second support profile is connected to the second side of the support frame, protrudes, preferably in the second direction, away from the second side of the support frame up to a furthest end of the second support surface of the second support beam for supporting on the second support surface of the second support beam when the building level module is arranged with the second side of the support frame against the second support beam.

[0018] This embodiment offers the advantage that the support portion of the first support profile and the second support profile make use of the entire second support surface of respectively the first support beam and the second support beam for supporting the building level module on the support beams, such that the building level module is firmly supported by the support beams.

[0019] In an embodiment of the set according to the present invention the first support profile comprises a connection portion configured for connecting the first support profile to the first side of the support frame of the building level module. In an embodiment of the set according to the present invention in combination with the embodiment of the set comprising the second support beam, the second support profile comprises a connection portion configured for connecting the second support profile to the second side of the support frame of the building level module.

[0020] In an embodiment of the set according to the present invention the connection portion of the first support profile

protrudes from the first support profile in an opposite direction as the support portion of the first support profile. Preferably, the first side of the support frame of the building level module comprises a first slot for fittingly receiving the connection portion of the first support profile. In an embodiment of the set according to the present invention in combination with the embodiment of the set comprising the second support beam, the connection portion of the second support profile protrudes from the second support profile in an opposite direction as the support portion of the second support profile. Preferably, the second side of the support frame of the building level module comprises a second slot for fittingly receiving the connection portion of the second support profile.

[0021] The first slot being configured for fittingly receiving the connection portion of the first support profile and the second slot being configured for fittingly receiving the connection portion of the second support profile, offers the advantage that the first support profile and the second support profile can be connected easily and quickly to respectively the first side and the second side of the support frame of the building level module by pushing the connection portion of the first support profile and the connection portion of the second support profile in respectively the first slot and the second slot, thereby clamping the connection portion of the first support profile and the connection portion of the second support profile in respectively the first slot and the second slot.

[0022] In an embodiment of the set according to the present invention the first support profile is configured such that, when the first support profile is connected to the first side of the support frame of the building level module and with the support portion of the first support profile supporting on the second support surface of the first support beam, the connection portion of the first support profile is located, preferably in the third direction, below the support portion of the first support profile. In an embodiment of the set according to the present invention in combination with the embodiment of the set comprising the second support beam, the second support profile is configured such that, when the second support profile is connected to the second side of the support frame of the building level module and with the support portion of the second support profile supporting on the second support surface of the second support beam, the connection portion of the second support profile is located, preferably in the third direction, below the support portion of the second support profile.

[0023] This embodiment offers the advantage that the weight of the building level module acting on the first support profile and the second support profile can be distributed along an upright portion of the first support profile and the second support profile going from their connecting portion to their support portion in order to reduce the stress on the first support profile and the second support profile.

[0024] In an embodiment of the set according to the present invention the first support profile is configured such that, when the first support profile is connected to the first side of the support frame of the building level module and the building level module is arranged with the first side of the support frame against the first support beam for supporting the support portion of the first support profile on the second support surface of the first support beam, a portion of the first support profile is arranged between the first support beam and the first side of the support frame of the building level module.

[0025] This embodiment offers the advantage that the portion of the first support profile that is arranged between the first support beam and the first side of the support frame of the building level module, can be clamped between the first support beam and the first side of the support frame of the building level module to hold the first support profile firmly in place when the building level module is supported on the first support beam.

[0026] In an embodiment of the set according to the present invention in combination with the embodiment of the set comprising the second support beam, the second support profile is configured such that, when the second support profile is connected to the second side of the support frame of the building level module and the building level module is arranged with the second side of the support frame against the second support beam for supporting the support portion of the second support profile on the second support surface of the second support beam, a portion of the second support profile is arranged between the second support beam and the second side of the support frame of the building level module.

[0027] This embodiment offers the advantage that the portion of the second support profile that is arranged between the second support beam and the second side of the support frame of the building level module, can be clamped between the second support beam and the second side of the support frame of the building level module to hold the second support profile firmly in place when the building level module is supported on the second support beam.

[0028] In an embodiment of the set according to the present invention at least one of the cover plate and the support frame of the building level module is manufactured of wood, preferably laminated veneer lumber.

[0029] The use of wood of the cover plate and/or the support frame of the building level module has the advantage that a strong building level module can be provided with a relatively low weight, for example in comparison with a building level assembled by means of steel beams. Thereby, the use of laminated veneer lumber further improves upon the strength of the building level module.

[0030] In an embodiment of the set according to the present invention at least one of the first support beam, if present, the second support beam and preferably, if present, the third support beam has a predetermined number of the first support surface and the second support surface arranged pairwise rotationally symmetric, preferably of the order of the predetermined number, around the at least one of the first support beam, if present, the second support beam and

preferably, if present, the third support beam.

[0031] The rotationally symmetric arranged first support surfaces and second support surfaces is beneficial for the ease of use of the set according to the present invention, since it allows the user to quickly put the at least one of the first support beam, if present, the second support beam and preferably, if present, the third support beam in the correct position for supporting the building level module.

[0032] In an embodiment of the set according to the present invention at least one of the first support beam, if present, the second support beam and preferably, if present, the third support beam has a cross shaped cross section. Preferably, the cross shaped cross section is rotationally symmetric.

[0033] The inventors have found that the cross shaped cross section is a beneficial shape for providing first support surfaces and second support surfaces on the support beams, wherein the ends of the four arms of the cross shaped cross section can be used as first support surfaces, and wherein the sides of the four arms of the cross shaped cross section can be used as second support surfaces.

[0034] In an embodiment of the set according to the present invention at least one of the first support beam, if present, the second support beam and, if present, the third support beam is manufactured of metal, preferably steel.

[0035] The use of metal, preferably steel, for the first support beam, the second support beam and/or the third support beam is beneficial for the strength of said support beams, and thus also for the strength of the building level assembled by means of said support beams.

[0036] In an embodiment of the set according to the present invention at least one of the first support beam, if present, the second support beam and, if present, the third support beam is a hollow profile.

[0037] Using hollow profiles as the first support beam, the second support beam and the third support beam is beneficial for reducing the weight of said support beams, and thus also for reducing the weight of the building level assembled by means of said support beams.

[0038] In an embodiment of the set according to the present invention the first support profile is pre-connected to the first side of the support frame of the building level module. In an embodiment of the set according to the present invention in combination with the embodiment of the set comprising the second support beam, the second support profile is pre-connected to the second side of the support frame of the building level module.

[0039] The first support profile and/or the second support profile being pre-connected to respectively the first side and the second side of the support frame of the building level module is beneficial for quickly assembling the building level on-site, since there is no longer a need for connecting the first support profile and/or the second support profile to respectively the first side and the second side of the support frame of the building level module.

[0040] Pre-connecting the first support profile and/or the second support profile to respectively the first side and the second side of the support frame of the building level module is also beneficial for assuring that the first support profile and/or the second support profile are strongly and correctly connected to respectively the first side and the second side of the support frame of the building level module.

[0041] In an embodiment of the set according to the present invention the size of the building level module in the second direction is greater than the size of the building level module in the first direction.

[0042] This embodiment offers the advantages that, in a building level assembled by means of the set, the building level module is well supported on at least one of the sides in the direction, i.e. the second direction, in which the building level module spans the largest distance, and would thus benefit the most from the improved support.

[0043] The present invention further provides a building level comprising the set according to the present invention. Preferably, the building level is a horizontal building level. Preferably, the building level is a floor or a roof. The first support beam is arranged in the first direction on top of a first wall section. The first support profile is connected to the first side of the support frame of the building level module. The building level module is supported on the first support beam with the first side of the support frame of the building level module arranged against the first support beam, with the first protruding portion of the cover plate supported on the first support surface of the first support beam, and with the support portion of the first support profile supported on the second support surface of the first support beam. Preferably, the second support surface of the first support beam is thereby arranged first when viewed in the second direction from the first side of the support frame. Preferably, the first support surface and the second support surface of the first support beam are thereby facing upwards in the third direction.

[0044] In an embodiment of the building level according to the present invention in combination with the embodiment of the set comprising the second support beam, the second support beam is arranged in the first direction on top of a second wall section opposite of the first wall section in the second direction. The second support profile is connected to the second side of the support frame of the building level module. The building level module is supported on the second support beam with the second side of the support frame of the building level module arranged against the second support beam, with the second protruding portion of the cover plate supported on the first support surface of the second support beam, and with the support portion of the second support profile supported on the second support surface of the second support beam. Preferably, the second support surface of the second support beam is thereby arranged first when viewed in the second direction from the second side of the support frame. Preferably, the first support surface and the second

support surface of the second support beam are thereby facing upwards in the third direction.

[0045] In an embodiment of the building level according to the present invention in combination with the embodiment of the set comprising the third support beam, the third support beam is arranged in the second direction on top of a third wall section. The building level module is supported on the third support beam with the third side of the support frame of the building level module arranged against the third support beam, and with the third protruding portion of the cover plate supported on the first support surface of the third support beam. Preferably, if present, the second support surface of the third support beam is thereby arranged first when viewed in the first direction from the third side of the support frame. Preferably, the first support surface and, if present, the second support surface of the third support beam are thereby facing upwards in the third direction.

[0046] The present invention further provides a method for assembling a building level by means of a set according to the present invention. The method comprises the step of arranging the first support beam in the first direction on top of a first wall section. The method comprises the step of connecting, if not yet connected, the fist support profile to the first side of the support frame of the building level module. The method comprises the step of supporting the building level module on the first support beam. The step of supporting the building level module on the first support beam comprises arranging the first side of the support frame of the building level module against the first support beam. Preferably, the second support surface of the first support beam is thereby arranged first when viewed in the second direction from the first side of the support frame. Preferably, the first support surface and the second support surface of the first support beam are thereby facing upwards in the third direction. The step of supporting the building level module on the first support beam comprises supporting the first protruding portion of the cover plate on the first support surface of the first support beam. The step of supporting the building level module on the first support beam comprises supporting the support portion of the first support profile on the second support surface of the first support beam.

[0047] In an embodiment of the method according to the present invention in combination with the embodiment of the set comprising the second support beam, the method also comprises the step of arranging the second support beam in the first direction on top of a second wall section opposite of the first wall section in the second direction. The method also comprises the step of connecting, if not yet connected, the second support profile to the second side of the support frame of the building level module. The method also comprises the step of supporting the building level module on the second support beam. The step of supporting the building level module on the second support beam comprises arranging the second side of the support frame of the building level module against the second support beam. Preferably, the second support surface of the second support beam is thereby arranged first when viewed in the second direction from the second side of the support frame. Preferably, the first support surface and the second support surface of the second support beam are thereby facing upwards in the third direction. The step of supporting the building level module on the second support beam comprises supporting the second protruding portion of the cover plate on the first support surface of the second support beam. The step of supporting the building level module on the second support beam comprises supporting the support portion of the second support profile on the second support surface of the second support beam.

[0048] In an embodiment of the method according to the present invention in combination with the embodiment of the set comprising the third support beam, the method also comprises the step of arranging the third support beam in the second direction on top of a third wall section. The method also comprises the step of supporting the building level module on the third support beam. The step of supporting the building level module on the third support beam comprises arranging the third side of the support frame of the building level module against the third support beam. Preferably, if present, the second support surface of the third support beam is thereby arranged first when viewed in the first direction from the third side of the support frame. Preferably, the first support surface and, if present, the second support surface of the third support beam are thereby facing upwards in the third direction. The step of supporting the building level module on the third support beam comprises supporting the third protruding portion of the cover plate on the first support surface of the third support beam.

Brief description of the drawings

[0049] The invention will be further elucidated by means of the following description and the appended figures.

Figure 1 shows a perspective view on a floor and a roof as a building level according to an embodiment of the present invention.

Figure 2 shows in perspective view a detail of the roof of Figure 1 supported on a first wall section.

Figure 3 shows in perspective view a detail of the roof of Figure 1 supported on a third wall section.

Figure 4 shows in perspective view a detail of the floor of Figure 1 supported on a first wall section.

Figure 5 shows in a side view a detail of the floor of Figure 1 supported on a first wall section and a second wall section.

Figure 6 shows in perspective view a detail of the floor of Figure 1 supported on a third wall section.

Figure 7 shows in a side view a detail of the floor of Figure 1 supported on a third wall section.

Figure 8 shows a perspective view on the bottom of a building level module of the floor and roof of Figure 1.

Figure 9 shows a perspective view on a first side of the building level module of Figure 8.
Figure 10 shows a perspective view on a support profile of the floor and roof of Figure 1.
Figure 11 shows a side view on the support profile of Figure 10.
Figure 12 shows a perspective view on a support beam of the floor and roof of Figure 1.
Figure 13 shows a side view on the support beam of Figure 12.

Modes for carrying out the invention

[0050] The present invention will be described with respect to particular embodiments and with reference to certain drawings but the invention is not limited thereto but only by the claims. The drawings described are only schematic and are non-limiting. In the drawings, the size of some of the elements may be exaggerated and not drawn on scale for illustrative purposes. The dimensions and the relative dimensions do not necessarily correspond to actual reductions to practice of the invention.

[0051] Furthermore, the terms first, second, third and the like in the description and in the claims, are used for distinguishing between similar elements and not necessarily for describing a sequential or chronological order. The terms are interchangeable under appropriate circumstances and the embodiments of the invention can operate in other sequences than described or illustrated herein.

[0052] Moreover, the terms top, bottom, over, under and the like in the description and the claims are used for descriptive purposes and not necessarily for describing relative positions. The terms so used are interchangeable under appropriate circumstances and the embodiments of the invention described herein can operate in other orientations than described or illustrated herein.

[0053] The term "comprising", used in the claims, should not be interpreted as being restricted to the means listed thereafter; it does not exclude other elements or steps. It needs to be interpreted as specifying the presence of the stated features, integers, steps or components as referred to, but does not preclude the presence or addition of one or more other features, integers, steps or components, or groups thereof. Thus, the scope of the expression "a device comprising means A and B" should not be limited to devices consisting only of components A and B. It means that with respect to the present invention, the only relevant components of the device are A and B.

[0054] Figure 1 show a floor 100 and a roof 100 as a building level 100 according to an embodiment of the present invention. Details of the roof 100 are shown in the Figures 2 and 3, and details of the floor 100 are shown in the Figures 4-7. In Figure 1-4, 6 and 7, for illustrative purposes, a second wall section 520 opposite of a first wall section 510 is omitted together with a portion of each building level 100 that would be supported on said second wall section 520. At the second wall section 520, each building level 100 is however arranged in a similar manner as at the first wall section 510 for supporting on the respective wall section 510, 520, as can be seen in Figure 5. Each building level 100 is assembled by means of a set according to an embodiment of the present invention, of which components 200, 300, 400 are shown separately in Figures 8-13.

[0055] The building level 100 is composed of at least one building level module 300, which forms the main component of the building level 100. Figure 1 shows, for illustrative purposes, only one of such a building level module 300 for each building level 100, but to form the complete building level 100 a plurality of similarly arranged building level modules 300 can be arranged next to each other in a first direction R1 in a horizontal plane.

[0056] The building level module 300, shown in more detail in Figures 8 and 9, comprises a cover plate 310 supported on and connected to a support frame 330. The cover plate 310 forms the upper surface of the building level 100 which can be covered with finishing layers, such as for example carpet in case of the building level 100 being a floor. The support frame 330 provides structural strength to the building level 100, and may also be used for holding insulation material, utility lines, etc. The cover plate 310 is rectangular in shape and extends in the horizontal plane in the first direction R1 and in a second direction R2 perpendicular to the first direction R1. In a third direction R3 perpendicular to the first direction R1 and the second direction R2, the cover plate 310 has a certain thickness.

[0057] The support frame 330, as can be seen in Figure 8, is composed of a first joist 332, a second joist 336, and a plurality of further joists 350, which are connected to each other for forming the support frame 330.

[0058] The first joist 332 is arranged, viewed in the second direction R2, at a first side 331 of the support frame 330. The first joist 332 extends in the first direction R1 and also extends downwards from the cover plate 310 in the third direction R3 over a certain height. In the second direction R2 the first joist 332 has a certain thickness. The first joist 332, as can be seen in the Figures 2, 4, 5 and 8, is arranged with respect to the cover plate 310 such that the cover plate 310 protrudes in the second direction R2 a predetermined distance D beyond the first joist 332 of the support frame 330, which forms the first side 331 of the support frame 330. Hereafter, the portion 311 of the cover plate 310 protruding beyond the first side 331 of the support frame 330 will be referred to as the first protruding portion 311.

[0059] The second joist 336 is arranged, viewed in the second direction R2, at a second side 335 of the support frame 330 opposite of the first side 331 of the support frame 330. The second joist 336 extends in the first direction R1 and also extends downwards from the cover plate 310 in the third direction R3 over a certain height, which is preferably the

same height as that of the first joist 332. In the second direction R2 the second joist 336 has a certain thickness, which is preferably the same thickness as that of the first joist 332. The second joist 336, as can be seen in the Figures 5 and 8, is arranged with respect to the cover plate 310 such that the cover plate 310 protrudes in the second direction R2 a predetermined distance D beyond the second joist 336 of the support frame 330, which forms the second side 335 of the support frame 330. Hereafter, the portion 312 of the cover plate 310 protruding beyond the second side 335 of the support frame 330 will be referred to as the second protruding portion 312.

[0060] The plurality of further joists 350 extend in the second direction R2 between the first joist 332 and the second joist 336. Thereby, the further joists 350 are arranged with one end against the first joist 332 and with an opposite end against the second joist 336. The further joists 350 also extend downwards from cover plate 310 in the third direction R3 over a certain height, which is preferably the same for all of the further joists 350, and which is preferably the same height as that of the first joist 332 and the second joist 336. In the first direction R1 the further joists 350 have a certain thickness, which is preferably the same for all of the further joists 350, and which is preferably the same thickness as that of the first joist 332 and the second joist 336.

[0061] In the first direction R1 the further joists 350 are spaced apart from each other at equal distances. In this arrangement, two outer further joists 350 can be distinguished among the further joists 350 in the first direction R1. A first outer further joist 350 in the first direction R1 forms a third side 341 of the support frame 330, and a second outer further joist 350 in the first direction R1 forms a fourth side 345 of the support frame 330. The first outer further joist 350, as can be seen in the Figures 3 and 6-8, is arranged with respect to the cover plate 310 such that the cover plate 310 protrudes in the first direction R1 a predetermined distance D beyond the first outer further joist 350 of the support frame 330. Hereafter, the portion 313 of the cover plate 310 protruding beyond the third side 341 of the support frame 330 will be referred to as the third protruding portion 313. In this embodiment, the second outer further joist 350 is arranged at the side of the cover plate 310, hence without a protruding portion of the cover plate 310 protruding beyond the second outer further joist 350. This is beneficial for connecting the building level module 300 to an adjacent building level module 300 having an outer further joist 350 arranged in a similar manner with respect to the cover plate 310. This allows said building level modules 300 to be placed next to each other with the outer further joists 350 arranged as such contacting each other, such that a connection can easily be realised by connecting said outer further joists 350 to each other, for example by means of screws. Alternatively, the second outer further joist 350 may be arranged with respect to the cover plate 310 such that the cover plate 310 protrudes in the first direction R1 a predetermined distance D beyond the second outer further joist 350 of the support frame 330. The portion of the cover plate 310 protruding beyond the fourth side 345 of the support frame 330 may then be referred to as the fourth protruding portion.

[0062] The cover plate 310 and the support frame 330, and more specifically at least the first joist 332, the second joist 336 and the further joists 350 of the support frame 330, are preferably made of wood, and more preferably of laminated veneer lumber.

[0063] The building level 100 also comprises a plurality of support beams 200, which are arranged on top of wall sections 510, 520, 530 of a building, and on which the at least one building level module 300 is supported directly and by means of support profiles 400, such as shown in Figure 1-7, and which also form part of the building level 100. In the Figures 1-7 the wall sections 510, 520, 530 are constructed of the same type of beams as the support beams 200, but it should be clear that the wall sections 510, 520, 530 can be constructed in any other suitable manner known to the skilled person which allows the support beams 200 to be arranged on top of the wall sections 510, 520, 530.

[0064] The support beams 200, as shown in detail in Figures 12 and 13, are hollow profiles, which extend along a longitudinal direction, and which have a cross shaped cross section with a rotational symmetry of the order four. The cross shaped cross section of the support beam 200 comprises four arms. The ends of these four arms form first support surfaces 210, which extend along the longitudinal direction of the support beam 200. These first support surfaces 210 are intended for supporting the cover plate 310 of the building level module 300 thereon, as shown in the Figures 2-7. The sides of the four arms of the support beam 200 form second support surfaces 220, which extend along the longitudinal direction of the support beam 200. The second support surfaces 220 are intended for supporting the support frame 330 of the building level module 300 thereon by means of a support profile 400, such as shown in Figures 2, 4 and 5, and described in further detail below.

[0065] In use, not all the first support surfaces 210 and the second support surfaces 220 of the support beam 200 are used for this purpose. For supporting a building level module 300, the support beam 200 is arranged such that one of the four arms of the support beam 200 is facing upwards in the third direction R3, and the support frame 330 of the building level module 300 is arranged with one of its sides 331, 335, 341 against the end of one of the sideways facing arms of the support beam 200. In this arrangement, the upwards facing first support surface 210 is the first support surface 210 that is used for supporting the cover plate 310 of the building level module 300. Then, the upwards facing second support surface 220 on the sideways facing arm of the support beam 200 against which the support frame 330 of the building level module 300 is arranged, is the second support surface 220 that is used for supporting the support frame 330 of the building level module 300 by means of the support profile 400. This upwards facing second support surface 220 is the second support surface 220 that is arranged below and in front of the upwards facing first support

surface 210, when viewed from the upwards facing first support surface 210 towards the support beam 200.

[0066] Since the cross shaped cross section of the support beam 200 has a rotational symmetry of the order four, a rotation of 90° or a multiple of 90° of the support beam 200 around its longitudinal axis results in another pair of the first support surfaces 210 and second support surfaces 220 becoming the first support surface 210 and the second support surface 220 on which the building level module 330 is supported.

[0067] The first support surfaces 210 have a predetermined first width W1, and the second support surfaces 220 have a predetermined second width W2. As illustrated in the Figures 5 and 7, the sum of the predetermined first width W1 and the predetermined second width W2 is approximately equal to the predetermined distance D with which the first protruding portion 311, the second protruding portion 312 and the third protruding portion 313 protrude beyond respectively the first side 331, the second side 335 and the third side 341 of the support frame 330 of the building level module 300.

[0068] As can be seen in Figures 1, 2, 4 and 5, a first support beam 200 of the support beams 200 supports the building level module 300 at the first side 331 of the support frame 330. The first support beam 200 is arranged with its longitudinal direction in the first direction R1 on a first wall section 510 extending in the first direction R1.

[0069] A second support beam 200 of the support beams 200 supports the building level module 300 at the second side 335 of the support frame 330, as can be seen in Figure 5. The second support beam 200 is arranged with its longitudinal direction in the first direction R1 on a second wall section 520 extending in the first direction R1. The second wall section 520 is located opposite of the first wall section 510 in the second direction R2 at such a distance from the first wall section 510 that the support frame 330 of the of the building level 300 fits in the second direction R2 between the first support beam 200 and the second support beam 200 arranged respectively on the first wall section 510 and the second wall section 520.

[0070] As can be seen in Figures 1, 3, 6 and 7, a third support beam 200 of the support beams 200 supports the building level module 300 at the third side 341 of the support frame 330. The third support beam 200 is arranged with its longitudinal direction in the second direction R2 on a third wall section 530. The third wall section 530 extends in the second direction R2 between opposing ends of the first wall section 510 and the second wall section 520.

[0071] As already explained above, in the building level 100 there is also made use of support profiles 400 for supporting the support frame 330 of the building level module 300 on the support beams 200, as can be seen in the Figures 2, 4 and 5. A first support profile 400 connected to the first side 331 of the support frame 330 is used for supporting the support frame 330 on the first support beam 200, and a second support profile 400 connected to the second side 335 of the support frame 330 is used for supporting the support frame 330 on the second support beam 200.

[0072] The support profile 400, as shown in detail Figures 10 and 11, extends along a longitudinal direction and has Z-shaped cross section. With the Z-shaped cross section the support profile 400 comprises an upright portion 420 extending in a height direction. The upright portion 420 has a predetermined height H. At the top of the upright portion 420, the support profile 400 comprises a support portion 410, which extends perpendicularly from the upright portion 420. The support portion 410 is the portion of the support profile 400 that is used for supporting on a second support surface 220 of a support beam 200. The support portion 410 has a width W2 that is approximately equal to the second width W2 of a second support surface 220 of a support beam 200. At the bottom of the upright portion 420, the support profile 400 comprises a connection portion 430, which extends perpendicularly from the upright portion 420 in direction opposite to that of the support portion 410. The connection portion 430 is used for connecting the support profile 400 to the support frame 330 of the building level module 300. The connection portion 430 being located below the support portion 410 in the height direction of the support profile 400 offers the advantage that loads on the connection portion 430 can be transferred upwards in the height direction along the upright portion 420 to the support portion 410. Furthermore, it should be noted that the support portion 410 and the connection portion 430 of the support profile 400 are arranged similarly, such that the support portion 410 can be used as the connection portion and the connection portion 430 as the support portion when the support profile 400 is flipped upside down.

[0073] For connecting the first support profile 400 to the first side 331 of the support frame 330 the first joist 332 is provided with a first slot 333, as can be seen in Figure 9. The first slot 333 extends along the first direction R1, and is arranged for fittingly receiving and thereby clamping the connection portion 430 of the first support profile 400, as can be seen in the Figures 2, 4 and 5. When the first support profile 400 is connected to the first side 331 of the support frame 330 of the building level module 300, the first support profile 400 extends with its longitudinal direction in the first direction R1, the connection portion 430 of the first support profile 400 is fully received and clamped in the first slot 333 of the first joist 332, the upright portion 420 of the first support profile 400 extends upwards in the third direction R3 against the first joist 332, and the support portion 410 protrudes away from the first side 331 of the support frame 330 in the second direction R2.

[0074] For connecting the second support profile 400 to the second side 335 of the support frame 330 the second joist 336 is, as can be seen in Figure 5, similarly provided with a second slot 337, which extends along the first direction R1, and which is arranged for fittingly receiving and thereby clamping the connection portion 430 of the second support profile 400. When the second support profile 400 is connected to the second side 335 of the support frame 330 of the building level module 300, the second support profile 400 extends with its longitudinal direction in the first direction R1,

the connection portion 430 of the second support profile 400 is fully received and clamped in the second slot 337 of the second joist 336, the upright portion 420 of the second support profile 400 extends upwards in the third direction R3 against the second joist 336, and the support portion 410 protrudes away from the first side 331 of the support frame 330 in the second direction R2.

[0075] To support the building level module 300 on the first support beam 200, the building level module 300 is, as can be seen in Figures 2, 4 and 5, arranged with the first side 331 of the support frame 330, to which the first support profile 400 is connected, against the end of one of the sideways facing arms of the first support beam 200. Thereby, the first protruding portion 311 of the cover plate 310 is supported on the first support surface 210 at the end of the upwards facing arm of the first support beam 200. Since the first protruding portion 311 of the cover plate 310 protrudes a distance D beyond the first joist 332, which is approximately equal to the sum of the first width W1 of the first support surface 210 of the first support beam 200 and the second width W2 of the second support surface 220 of the first support beam 200 arranged in front and below the first support surface 210, the first protruding portion 311 extends up to the furthest end 211 of the first support surface 210 of the first support beam 200, such that the entire first support surface 210 of the first support beam 200 is used for support. With the first side 331 of the support frame 330 arranged against the first support beam 200, the first support profile 400 is clamped with the upright portion 420 in between the first support beam 200 and the first joist 332 of the support frame 330, such that the first support profile 400 is held firmly in place.

[0076] The predetermined height H of the upright portion 420 of the first support profile 400 and the position of the first slot 333 on the first joist 332 in the third direction R3 are chosen such that, when the first side 331 of the support frame 330 is arranged against the first support beam 200 and the first protruding portion 311 of the cover plate 310 is supported on the first support surface 210 of the first support beam 200, the support portion 410 of the first support profile 400 is located directly above the second support surface 220 of the first support beam 200 arranged in front and below the first support surface 210, and as such supported on said second support surface 220. Since the support portion 410 of the first support profile 400 has a width W2 that is approximately equal to the second width W2 of the second support surface 220 of the first support beam 200, the support portion 410 extends up to the furthest end 221 of the second support surface 220 of the first support beam 200, such that the entire second support surface 220 of the first support beam 200 is used for support.

[0077] To support the building level module 300 on the second support beam 200, the building level module 300 is, as can be seen in Figure 5, arranged with the second side 335 of the support frame 330, to which the second support profile 400 is connected, against the end of one of the sideways facing arms of the second support beam 200. Thereby, the second protruding portion 312 of the cover plate 310 is supported on the first support surface 210 at the end of the upwards facing arm of the second support beam 200. Since the second protruding portion 312 of the cover plate 310 protrudes a distance D beyond the second joist 336, which is approximately equal to the sum of the first width W1 of the first support surface 210 of the second support beam 200 and the second width W2 of the second support surface 220 of the second support beam 200 arranged in front and below the first support surface 210, the second protruding portion 312 extends up to the furthest end 211 of the first support surface 210 of the second support beam 200, such that the entire first support surface 210 of the second support beam 200 is used for support. With the second side 335 of the support frame 330 arranged against the second support beam 200, the second support profile 400 is clamped with the upright portion 420 in between the second support beam 200 and the second joist 336 of the support frame 330, such that the second support profile 400 is held firmly in place.

[0078] The predetermined height H of the upright portion 420 of the second support profile 400 and the position of the second slot 337 on the second joist 336 in the third direction R3 are chosen such that, when the second side 335 of the support frame 330 is arranged against the second support beam 200 and the second protruding portion 312 of the cover plate 310 is supported on the first support surface 210 of the second support beam 200, the support portion 410 of the second support profile 400 is located directly above the second support surface 220 of the second support beam 200 arranged in front and below the first support surface 210, and as such supported on said second support surface 220. Since the support portion 410 of the second support profile 400 has a width W2 that is approximately equal to the second width W2 of the second support surface 220 of the second support beam 200, the support portion 410 extends up to the furthest end 221 of the second support surface 220 of the second support beam 200, such that the entire second support surface 220 of the second support beam 200 is used for support.

[0079] To support the building level module 300 on the third support beam 200, the building level module 300 is, as can be seen in the Figures 3, 6 and 7, arranged with the third side 341 of the support frame 330 against the end of one of the sideways facing arms of the third support beam 200. Thereby, the third protruding portion 313 of the cover plate 310 is supported on the first support surface 210 at the end of the upwards facing arm of the third support beam 200. Since the third protruding portion 313 of the cover plate 310 protrudes a distance D beyond the first outer further joist 350, which is approximately equal to the sum of the first width W1 of the first support surface 210 of the third support beam 200 and the second width W2 of the second support surface 220 of the third support beam 200 arranged in front and below the first support surface 210, the third protruding portion 313 extends up to the furthest end 211 of the first support surface 210 of the third support beam 200, such that the entire first support surface 210 of the third support

beam 200 is used for support.

References

100	building level	200	support beam
210	first support surface	345	fourth side
211	furthest end	350	further joist
220	second support surface	400	support profile
221	furthest end	410	support portion
300	building level module	420	upright portion
310	cover plate	430	connection portion
311	first protruding portion	510	first wall section
312	second protruding portion	520	second wall section
313	third protruding portion	530	third wall section
330	support frame	R1	first direction
331	first side	R2	second direction
332	first joist	R3	third direction
333	first slot	D	distance
335	second side	W1	first width
336	second joist	W2	second width
337	second slot	H	height
341	third side		

Claims

1. A set for assembling a building level (100), wherein the set comprises:

a first support beam (200) extending along a first direction (R1), wherein the first support beam (200) is provided with a first support surface (210) and a second support surface (220), each extending along the first direction (R1), wherein the second support surface (220) is arranged in front of the first support surface (210) and below the first support surface (210);
a building level module (300) for supporting on the first support beam (200), wherein the building level module (300) comprises a cover plate (310) supported on a support frame (330), wherein the cover plate (310) extends in the first direction (R1) and a second direction (R2), wherein the support frame (330) has, viewed in the second direction (R2), a first side (331) extending in the first direction (R1), wherein the cover plate (310) comprises a first protruding portion (311) that protrudes beyond the first side (331) of the support frame (330) for supporting on the first support surface (210) of the first support beam (200) when the building level module (300) is arranged with the first side (331) of the support frame (330) against the first support beam (200); and
a first support profile (400) configured for being connected to the first side (331) of the support frame (330), wherein the first support profile (400) has a support portion (410), wherein the first support profile (400) is configured such that the support portion (410), when the first support profile (400) is connected to the first side (331) of the support frame (330), protrudes away from the first side (331) of the support frame (330) for supporting on the second support surface (220) of the first support beam (200) when the building level module (300) is arranged with the first side (331) of the support frame (330) against the first support beam (200).

2. The set according to claim 1, wherein the set comprises a second support beam (200) extending along the first direction (R1), wherein the second support beam (200) is provided with a first support surface (210) and a second support surface (220), each extending along the first direction (R1), wherein the second support surface (220) is arranged in front of the first support surface (210) and below the first support surface (210), wherein the support frame (330) of the building level module (300) has, viewed in the second direction (R2), a second side (335) opposite of the first side (331) and extending in the first direction (R1), wherein the cover plate (310) comprises a second protruding portion (312) that protrudes beyond the second side (335) of the support frame (330) for supporting on the first support surface (210) of the second support beam (200) when the building level module (300) is arranged with the second side (335) of the support frame (330) against the second support beam (200), and wherein the set comprises a second support profile (400) configured for being connected to the second side (335) of the support frame (330), wherein the second support profile (400) has a support portion (410), wherein the second support

profile (400) is configured such that the support portion (410), when the second support profile (400) is connected to the second side (335) of the support frame (330), protrudes away from the second side (335) of the support frame (330) for supporting on the second support surface (220) of the second support beam (200) when the building level module (300) is arranged with the second side (335) of the support frame (330) against the second support beam (200).

3. The set according to claim 1 or 2, wherein the set comprises a third support beam (200) extending along the second direction (R2), wherein the third support beam (200) is provided with a first support surface (210) extending along the second direction (R2), wherein the support frame (330) has, viewed in the first direction (R1), a third side (341) extending in the second direction (R2), wherein the cover plate (310) comprises a third protruding portion (313) that protrudes beyond the third side (341) of the support frame (330) for supporting on the first support surface (210) of the third support beam (200) when the building level module (300) is arranged with the third side (341) of the support frame (330) against the third support beam (200).

4. The set according to any one of the claims 1-3, wherein the first protruding portion (311) of the cover plate (310) protrudes beyond the first side (331) of the support frame (330) up to a furthest end (211) of the first support surface (210) of the first support beam (200) for supporting on the first support surface (210) of the first support beam (200) when the building level module (300) is arranged with the first side (331) of the support frame (330) against the first support beam (200), wherein, at least in combination with claim 2, the second protruding portion (312) of the cover plate (310) protrudes beyond the second side (335) of the support frame (330) up to a furthest end (211) of the first support surface (210) of the second support beam (200) for supporting on the first support surface (210) of the second support beam (200) when the building level module (300) is arranged with the second side (335) of the support frame (330) against the second support beam (200), and wherein, at least in combination with claim 3, the third protruding portion (313) of the cover plate (310) protrudes beyond the third side (341) of the support frame (330) up to a furthest end (211) of the first support surface (210) of the third support beam (200) for supporting on the first support surface (210) of the third support beam (200) when the building level module (300) is arranged with the third side (341) of the support frame (330) against the third support beam (200).

5. The set according to any one of the claims 1-4, wherein the first support profile (400) is configured such that the support portion (410), when the first support profile (400) is connected to the first side (331) of the support frame (330), protrudes away from the first side (331) of the support frame (330) up to a furthest end (221) of the second support surface (220) of the first support beam (200) for supporting on the second support surface (220) of the first support beam (200) when the building level module (300) is arranged with the first side (331) of the support frame (330) against the first support beam (200), and wherein, at least in combination with claim 2, the second support profile (400) is configured such that the support portion (410), when the second support profile (400) is connected to the second side (335) of the support frame (330), protrudes away from the second side (335) of the support frame (330) up to a furthest end (221) of the second support surface (220) of the second support beam (200) for supporting on the second support surface (220) of the second support beam (200) when the building level module (300) is arranged with the second side (335) of the support frame (330) against the second support beam (200).

6. The set according to any one of the claims 1-5, wherein the first support profile (400) comprises a connection portion (430) configured for connecting the first support profile (400) to the first side (331) of the support frame (330) of the building level module (300), and/or wherein, at least in combination with claim 2, the second support profile (400) comprises a connection portion (430) configured for connecting the second support profile (400) to the second side (335) of the support frame (330) of the building level module (300).

7. The set according to claim 6, wherein the connection portion (430) of the first support profile (400) protrudes in an opposite direction as the support portion (410) of the first support profile (400), and wherein the first side (331) of the support frame (330) of the building level module (300) comprises a first slot (333) for fittingly receiving the connection portion (430) of the first support profile (400), and/or, wherein at least in combination with claim 2, the connection portion (430) of the second support profile (400) protrudes in an opposite direction as the support portion (410) of the second support profile (400), and wherein the second side (335) of the support frame (330) of the building level module (300) comprises a second slot (337) for fittingly receiving the connection portion (430) of the second support profile (400).

8. The set according to claim 6 or 7, wherein the first support profile (400) is configured such that, when the first support profile (400) is connected to the first side (331) of the support frame (330) of the building level module (300) and with the support portion (410) of the first support profile (400) supporting on the second support surface (220) of the

first support beam (200), the connection portion (430) of the first support profile (400) is located below the support portion (410) of the first support profile (400), and/or wherein, at least in combination with claim 2, the second support profile (400) is configured such that, when the second support profile (400) is connected to the second side (335) of the support frame (330) of the building level module (300) and with the support portion (410) of the second support profile (400) supporting on the second support surface (220) of the second support beam (200), the connection portion (430) of the second support profile (400) is located below the support portion (410) of the second support profile (400).

9. The set according to any one of the claims 1-8, wherein the first support profile (400) is configured such that, when the first support profile (400) is connected to the first side (331) of the support frame (330) of the building level module (300) and the building level module (300) is arranged with the first side (331) of the support frame (330) against the first support beam (200) for supporting the support portion (410) of the first support profile (400) on the second support surface (220) of the first support beam (200), a portion (420) of the first support profile (400) is arranged between the first support beam (200) and the first side (331) of the support frame (330) of the building level module (300), and/or, wherein at least in combination with claim 2, the second support profile (400) is configured such that, when the second support profile (400) is connected to the second side (335) of the support frame (330) of the building level module (300) and the building level module (300) is arranged with the second side (335) of the support frame (330) against the second support beam (200) for supporting the support portion (410) of the second support profile (400) on the second support surface (220) of the second support beam (200), a portion (420) of the second support profile (400) is arranged between the second support beam (200) and the second side (335) of the support frame (330) of the building level module (300).

10. The set according to any one of the claims 1-9, wherein at least one of the first support beam (200) and, if present, the second support beam (200) has a predetermined number of the first support surface (210) and the second support surface (220) arranged pairwise rotationally symmetric, preferably of the order of the predetermined number, around the at least one of the first support beam (200) and, if present, the second support beam (200).

11. The set according to any one of the claims 1-10, wherein at least one of the first support beam (200) and, if present, the second support beam (200) has a cross shaped cross section.

12. The set according to any one of the claims 1-11, wherein at least one of the first support beam (200), if present, the second support beam (200) and, if present, the third support beam (200) is a hollow profile.

13. The set according to any one of the claims 1-12, wherein the size of the building level module (300) in the second direction (R2) is greater than the size of the building level module (300) in the first direction (R1).

14. A building level (100) comprising the set according to any one of the claims 1-13, wherein the first support beam (200) is arranged in the first direction (R1) on top of a first wall section (510), wherein the first support profile (400) is connected to the first side (331) of the support frame (330) of the building level module (300), wherein the building level module (300) is supported on the first support beam (200) with the first side (331) of the support frame (330) of the building level module (300) arranged against the first support beam (200), with the first protruding portion (311) of the cover plate (310) supported on the first support surface (210) of the first support beam (200), and with the support portion (410) of the first support profile (400) supported on the second support surface (220) of the first support beam (200).

15. A method for assembling a building level (100) by means of a set according to any one of the claims 1-13, wherein the method comprises the steps of:

arranging the first support beam (200) in the first direction (R1) on top of a first wall section (510);
connecting, if not yet connected, the fist support profile (400) to the first side (331) of the support frame (330) of the building level module (300); and
supporting the building level module (300) on the first support beam (200) by:

arranging the first side (331) of the support frame (330) of the building level module (300) against the first support beam (200);
supporting the first protruding portion (311) of the cover plate (310) on the first support surface (210) of the first support beam (200); and
supporting the support portion (410) of the first support profile (400) on the second support surface (220)

of the first support beam (200).

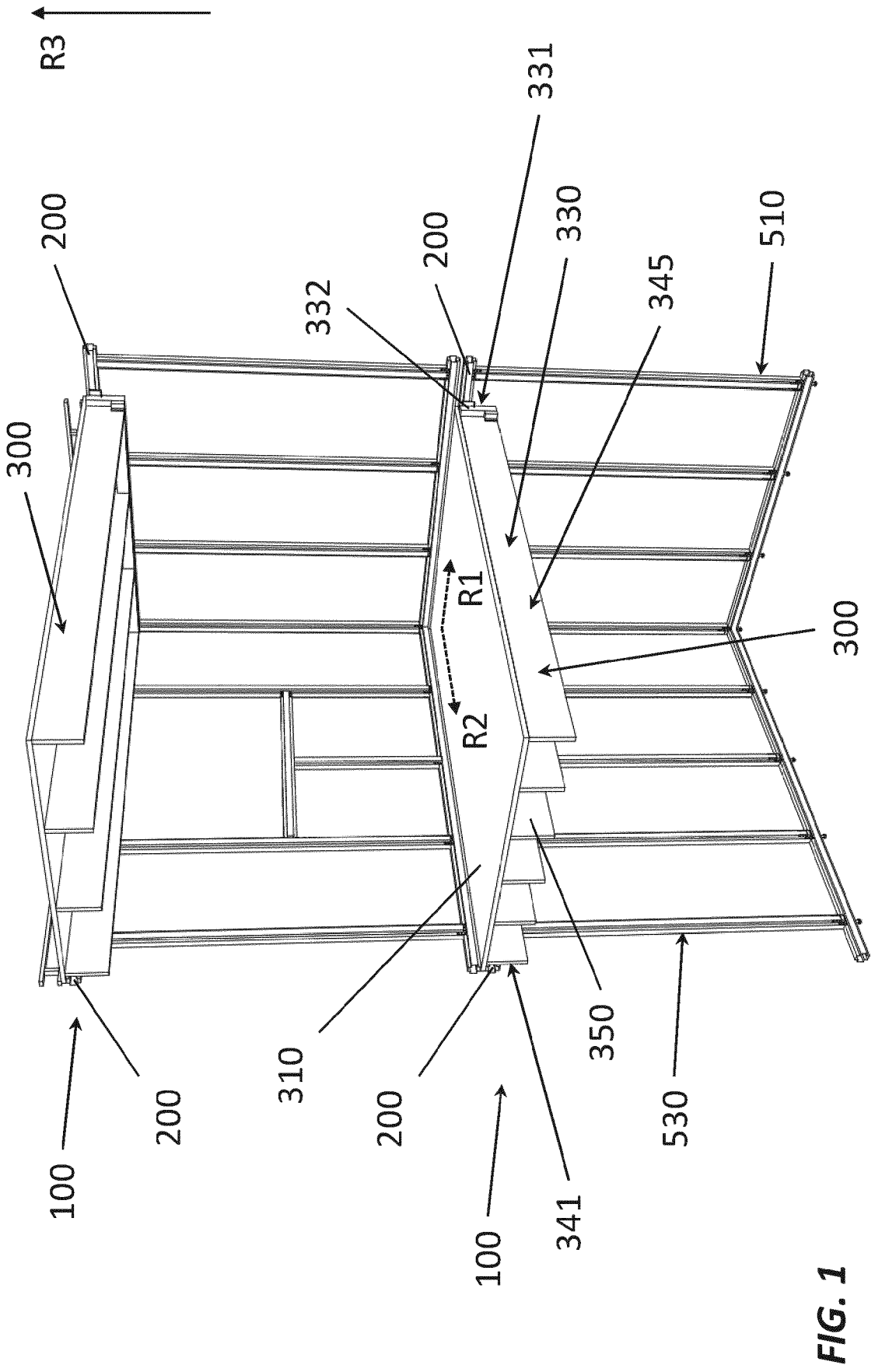
R3
331
200
330
200
510
332
345
300
R1
300
R2
350
310
200
530
200
100
341
100

FIG. 1

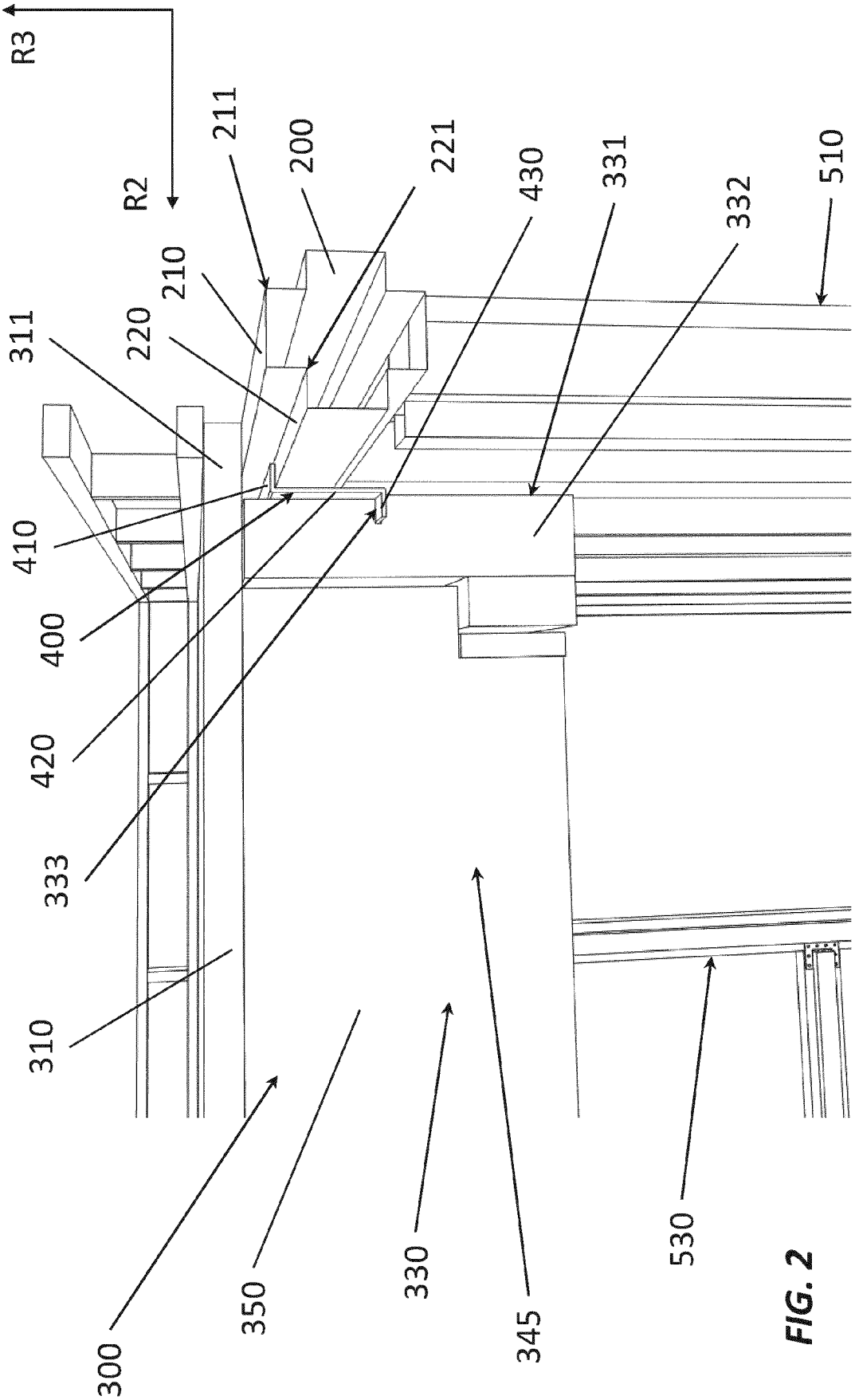
R3
R2
211
200
221
430
331
332
510
210
220
311
410
400
420
333
310
300
350
330
345
530

FIG. 2

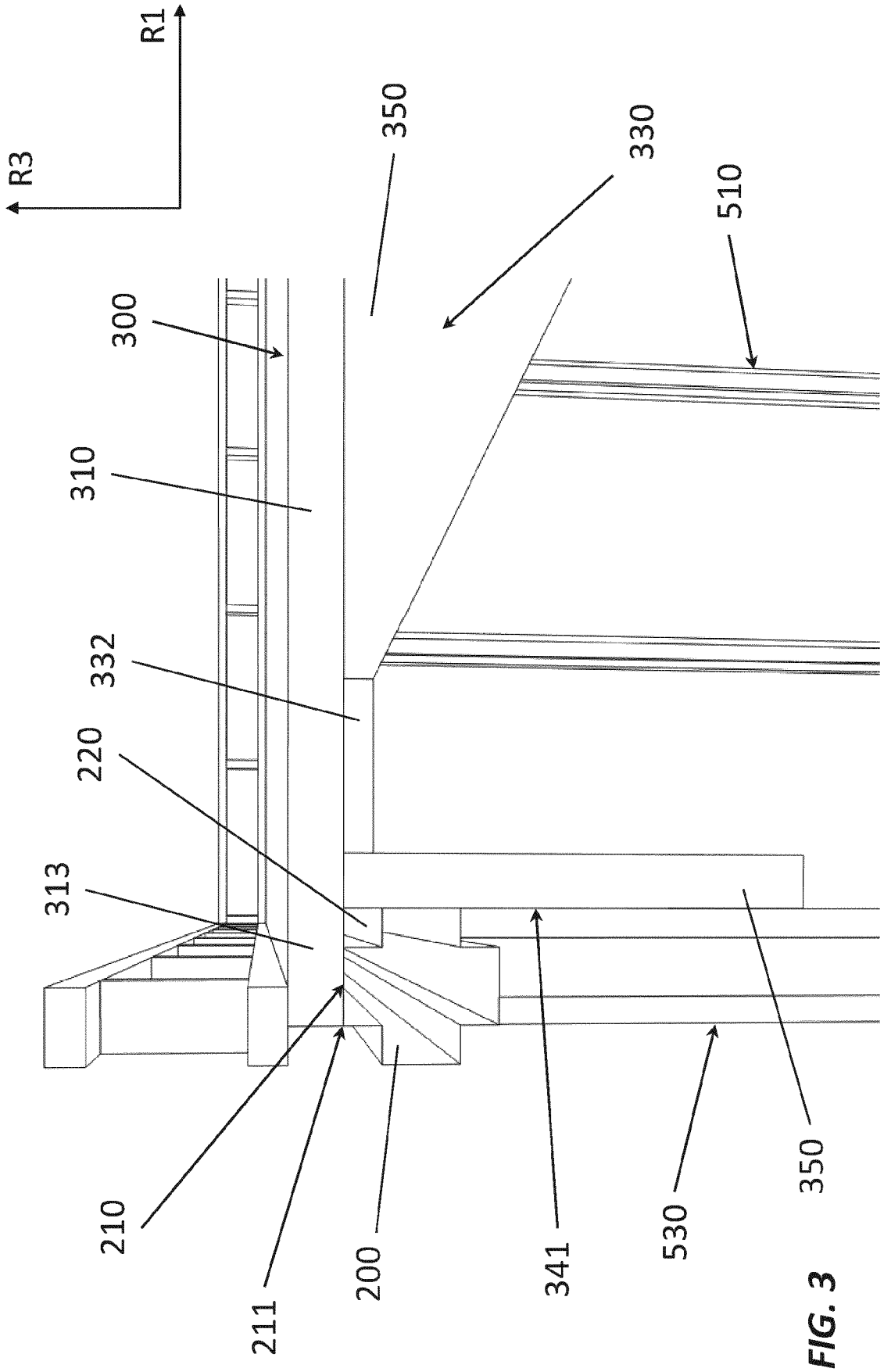

FIG. 3

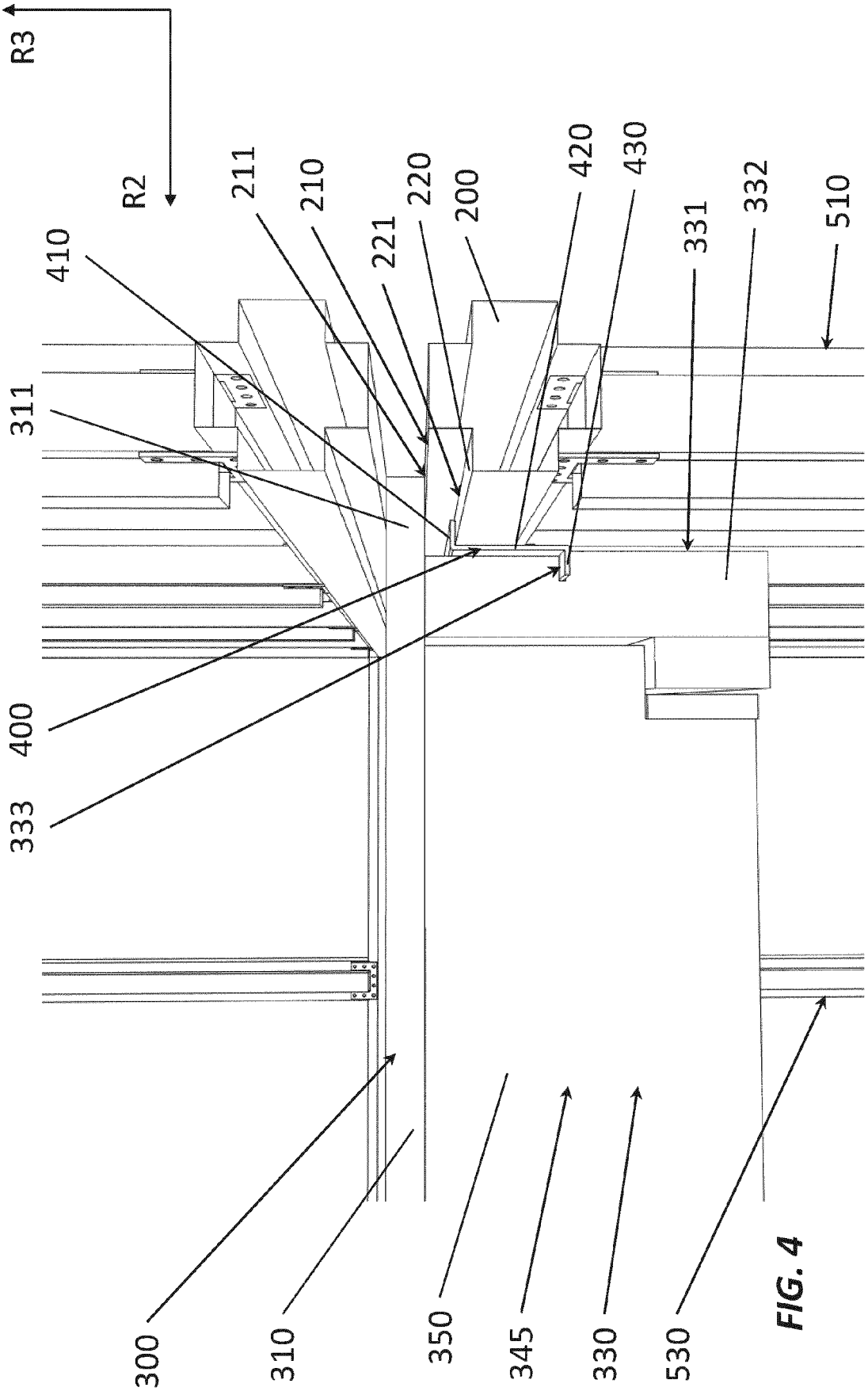
R3
R2
211
210
220
221
200
420
430
331
332
510
410
311
400
333
300
310
350
345
330
530

FIG. 4

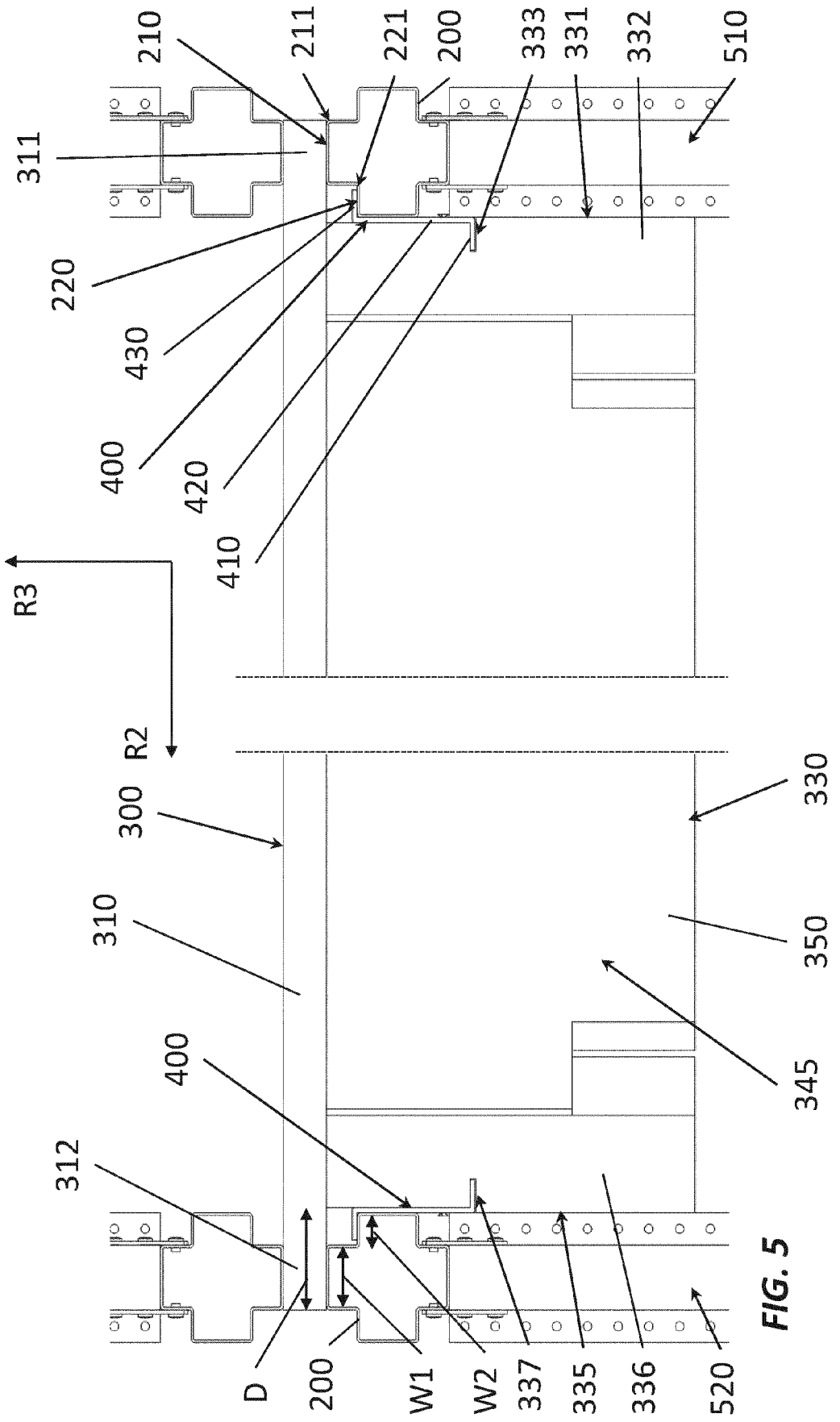
210
211
221
200
333
331
332
510
311
220
430
400
420
410
R3
R2
300
330
310
350
400
345
312
D
200
W1
W2
337
335
336
520

FIG. 5

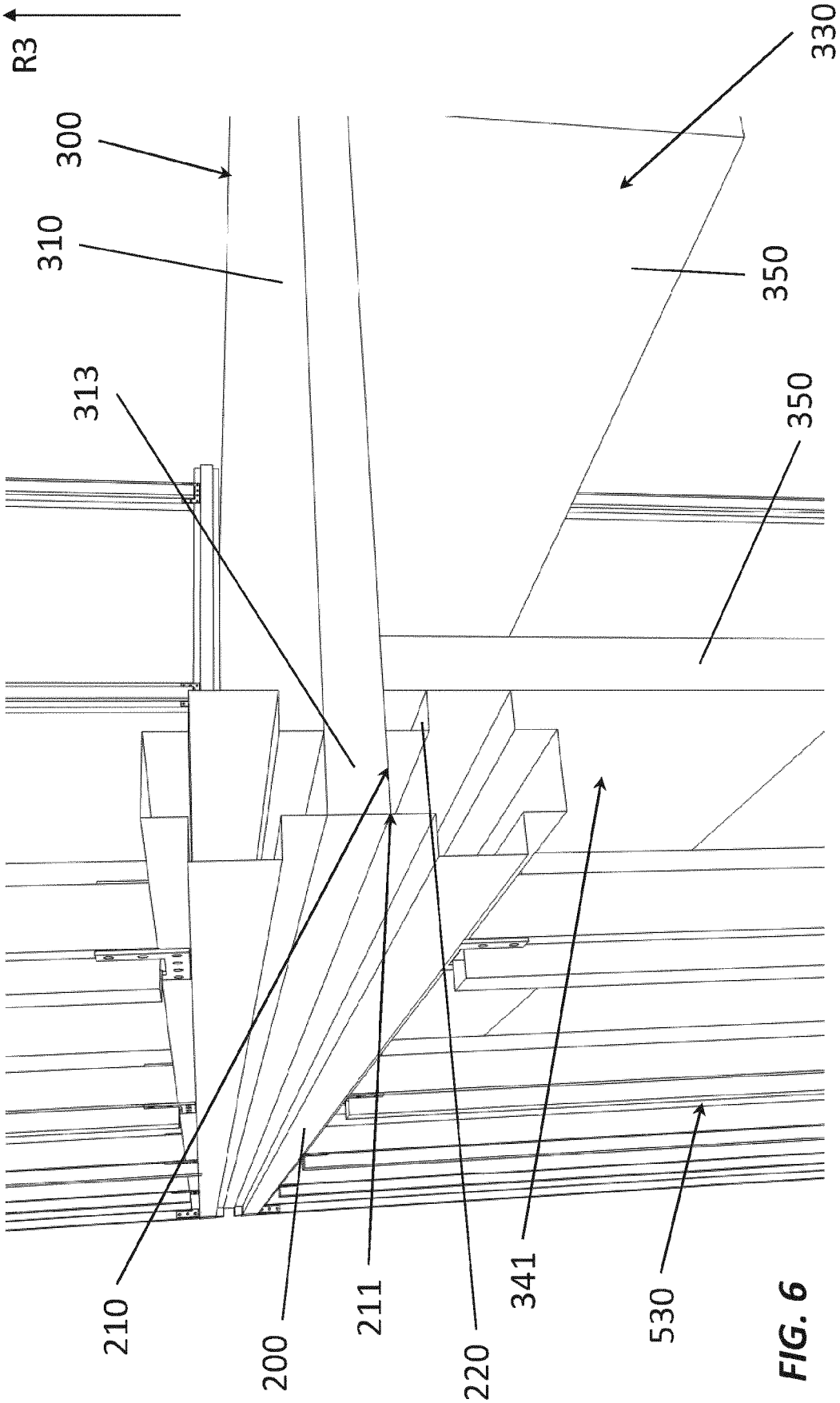

FIG. 6

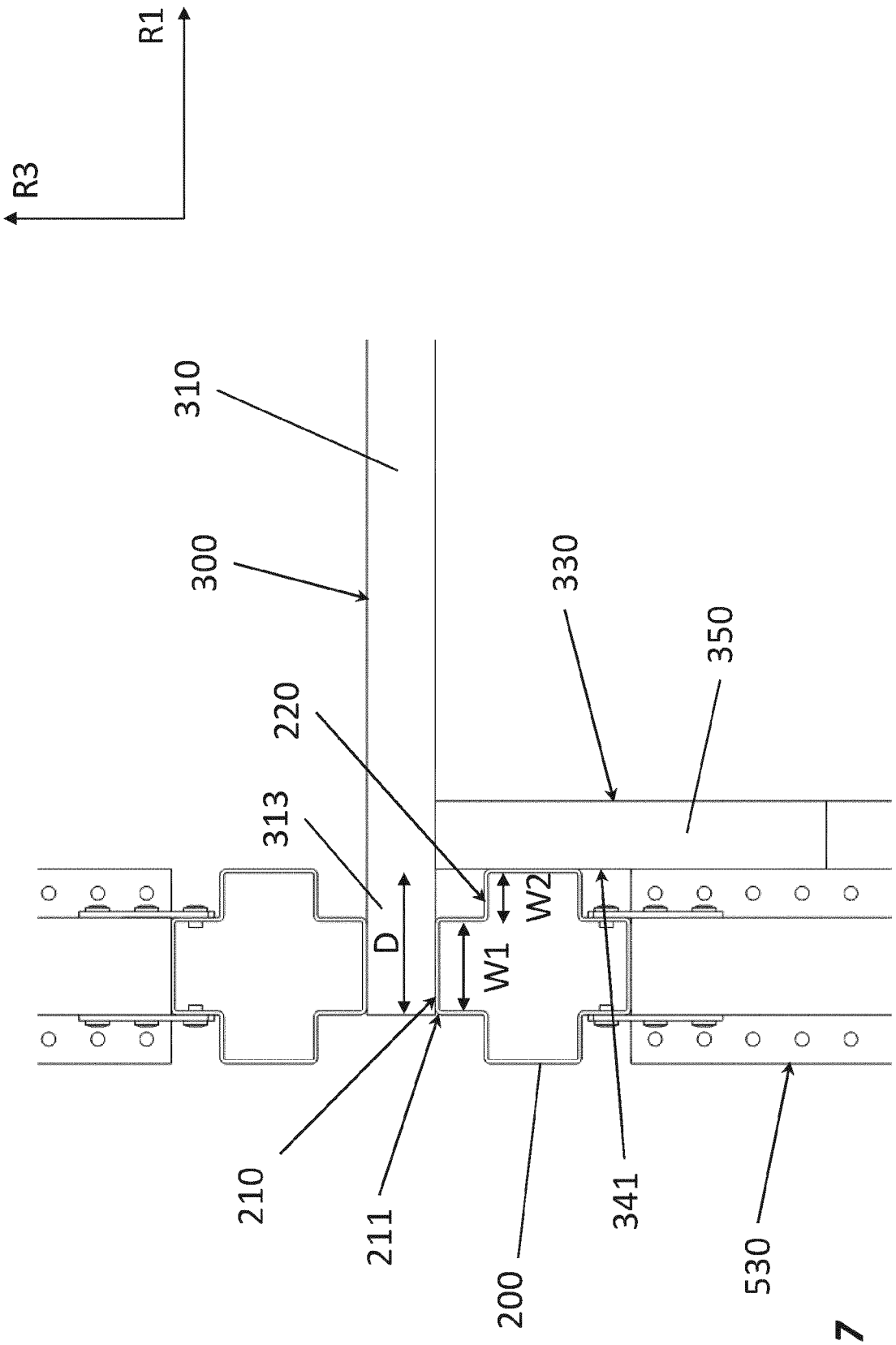

FIG. 7

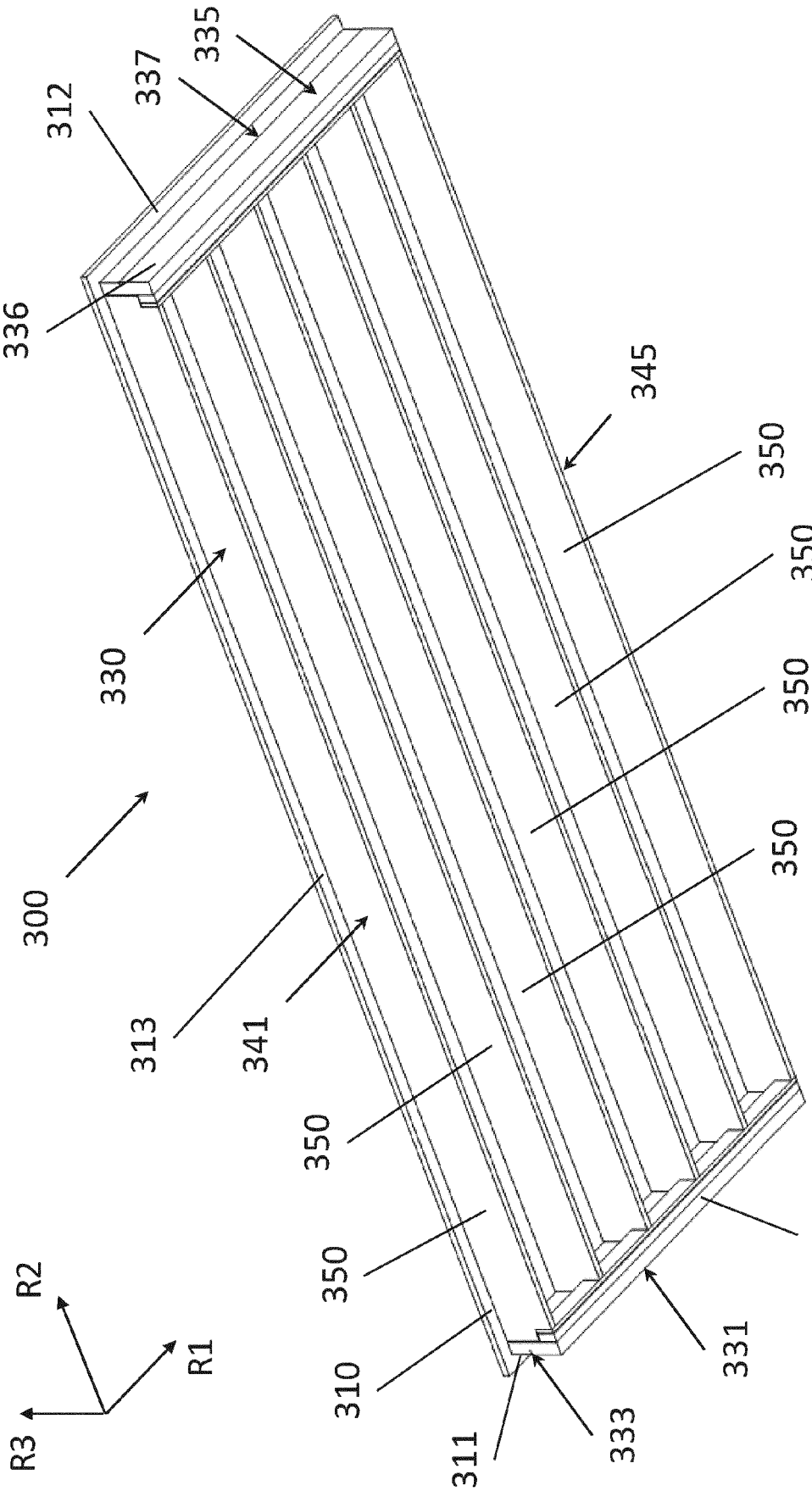
335
337
312
336
345
350
350
350
350
330
300
313
341
350
350
310
311
333
331
332
R2
R1
R3

FIG. 8

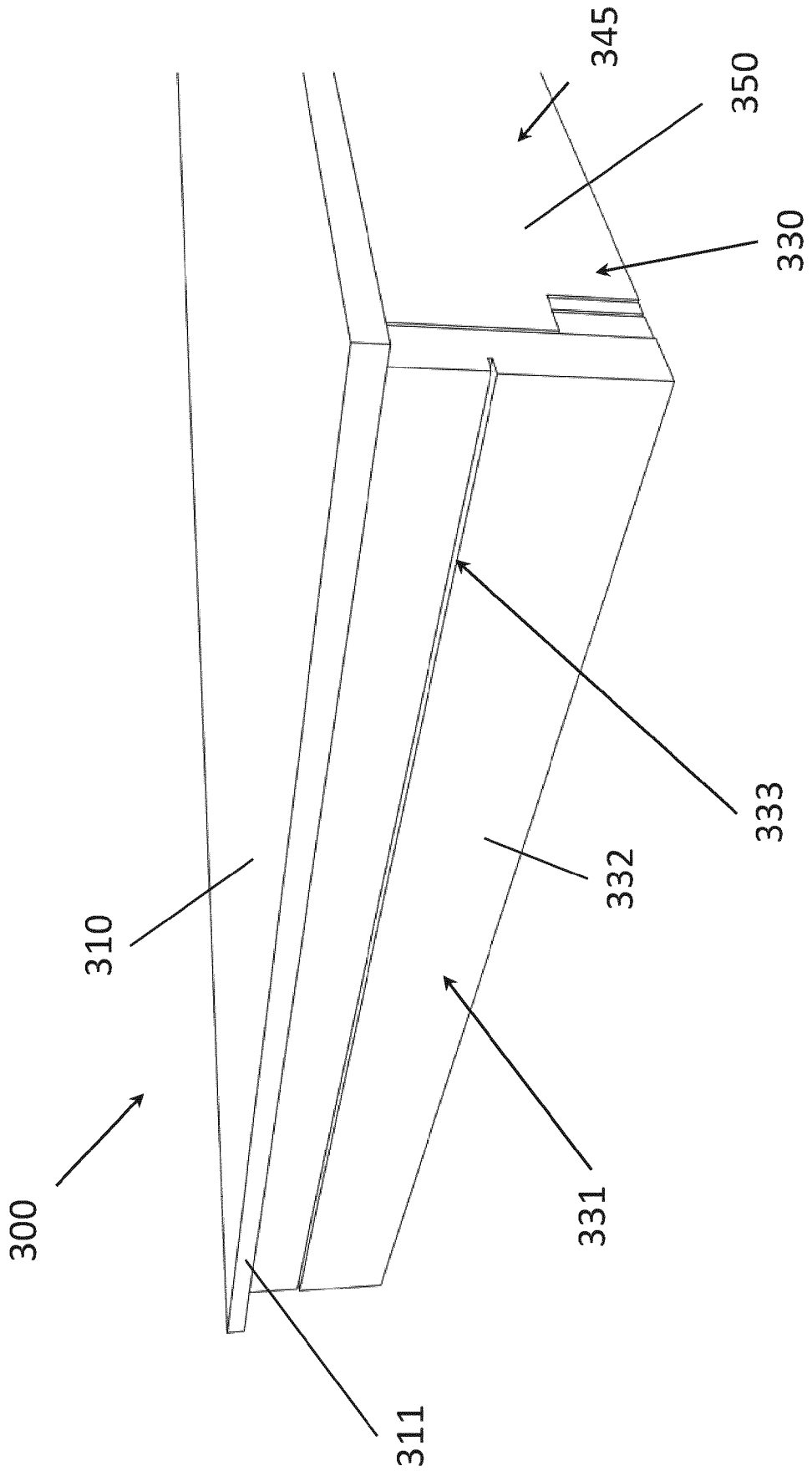

FIG. 9

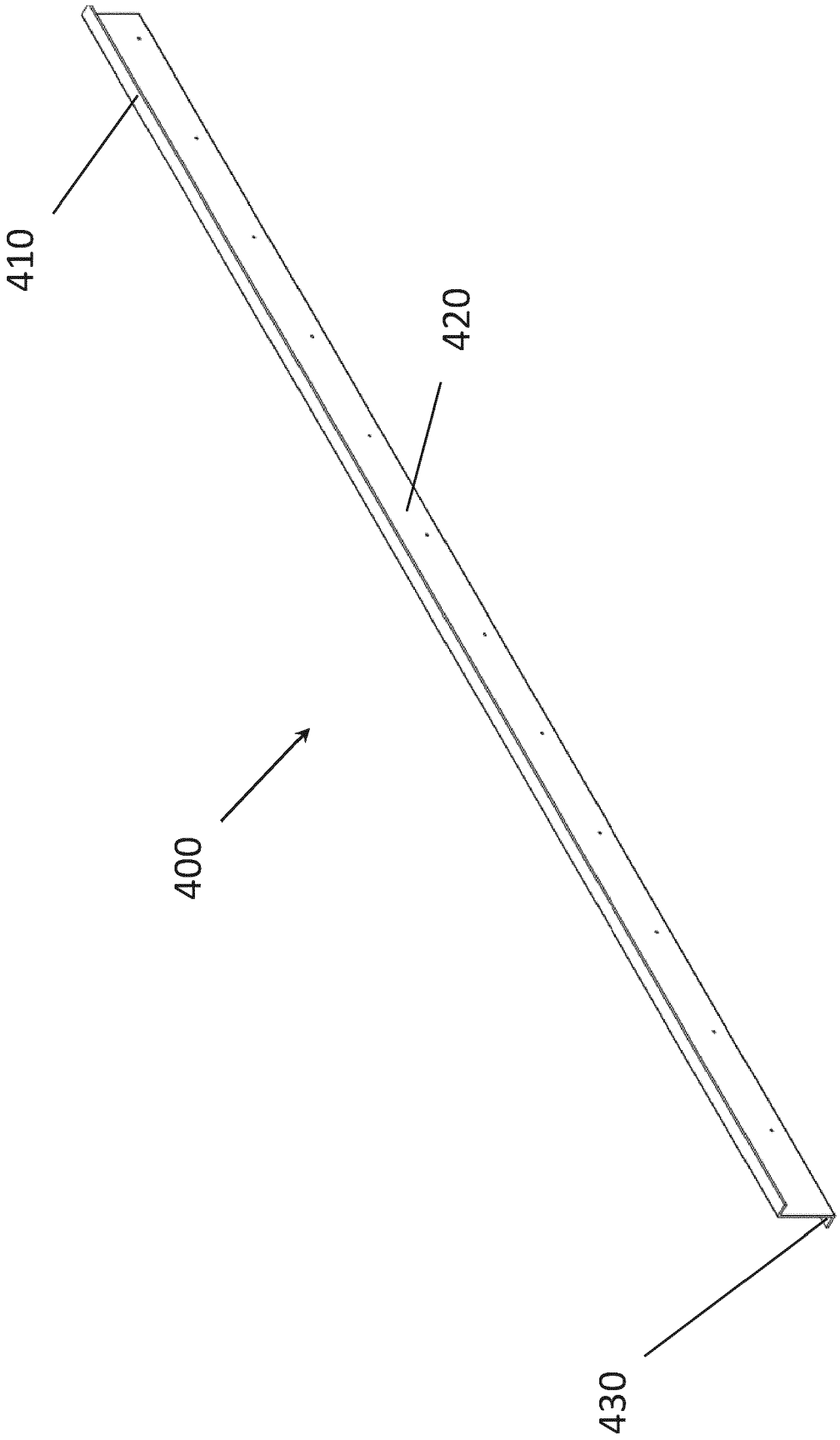

FIG. 10

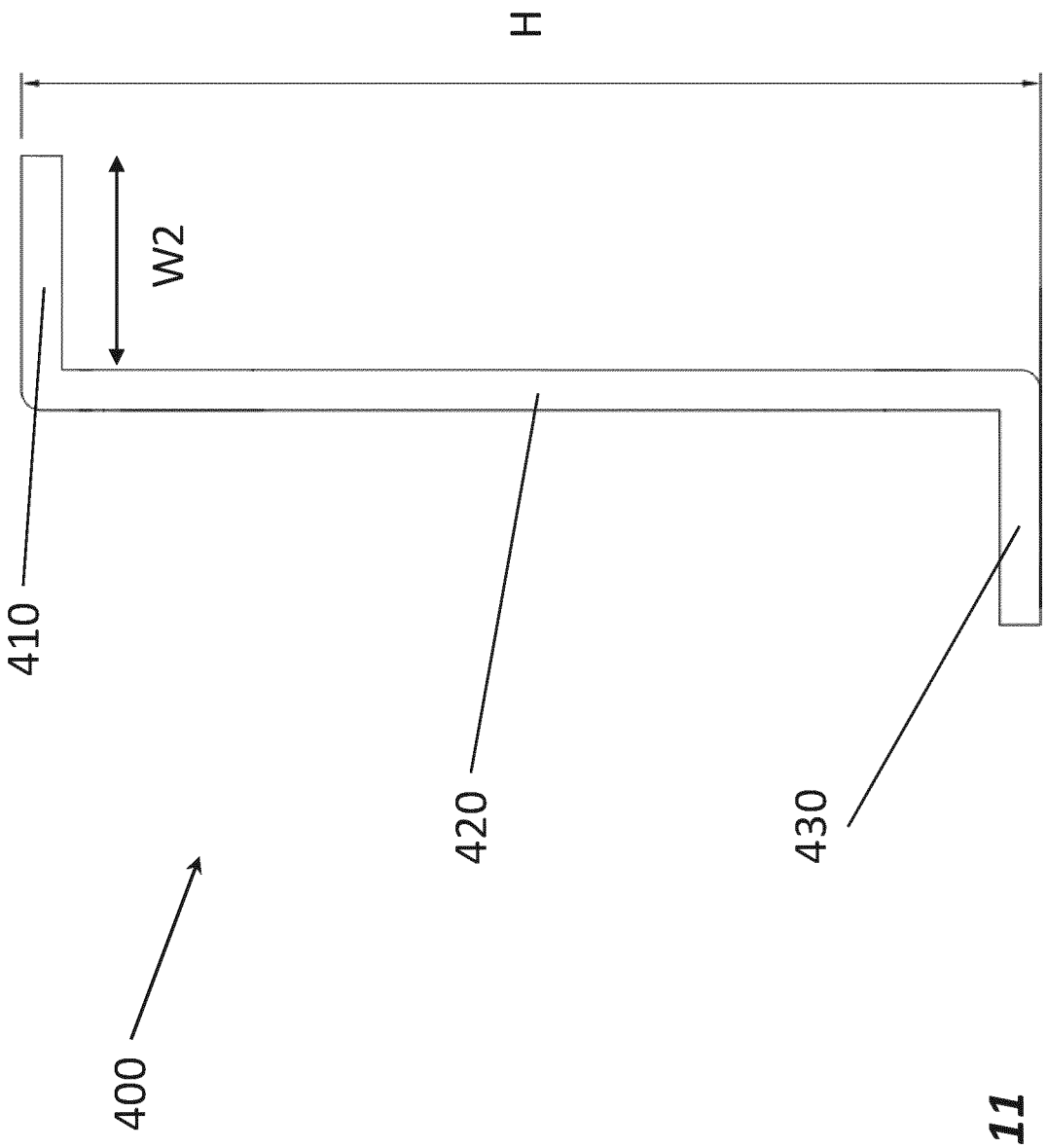

FIG. 11

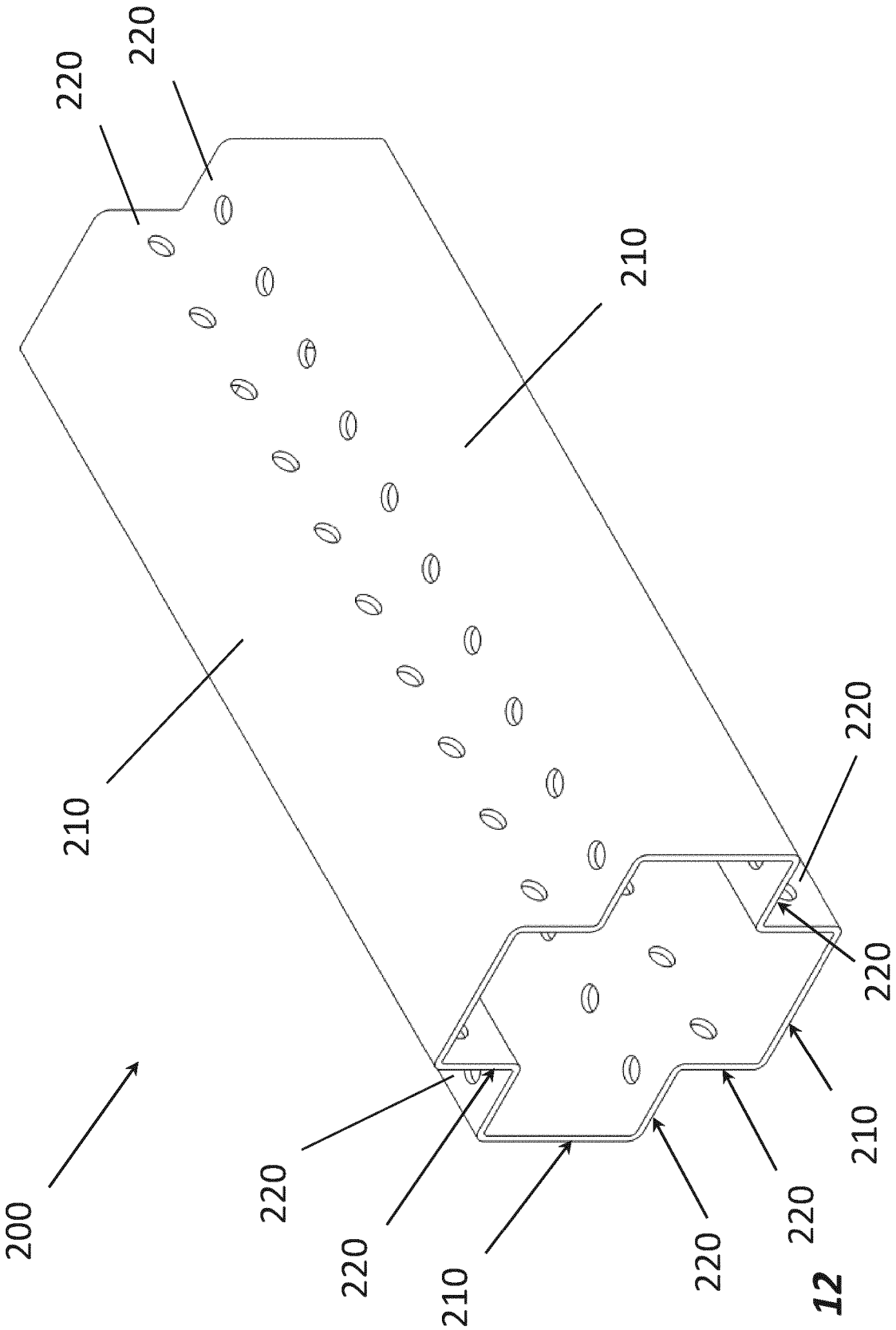

FIG. 12

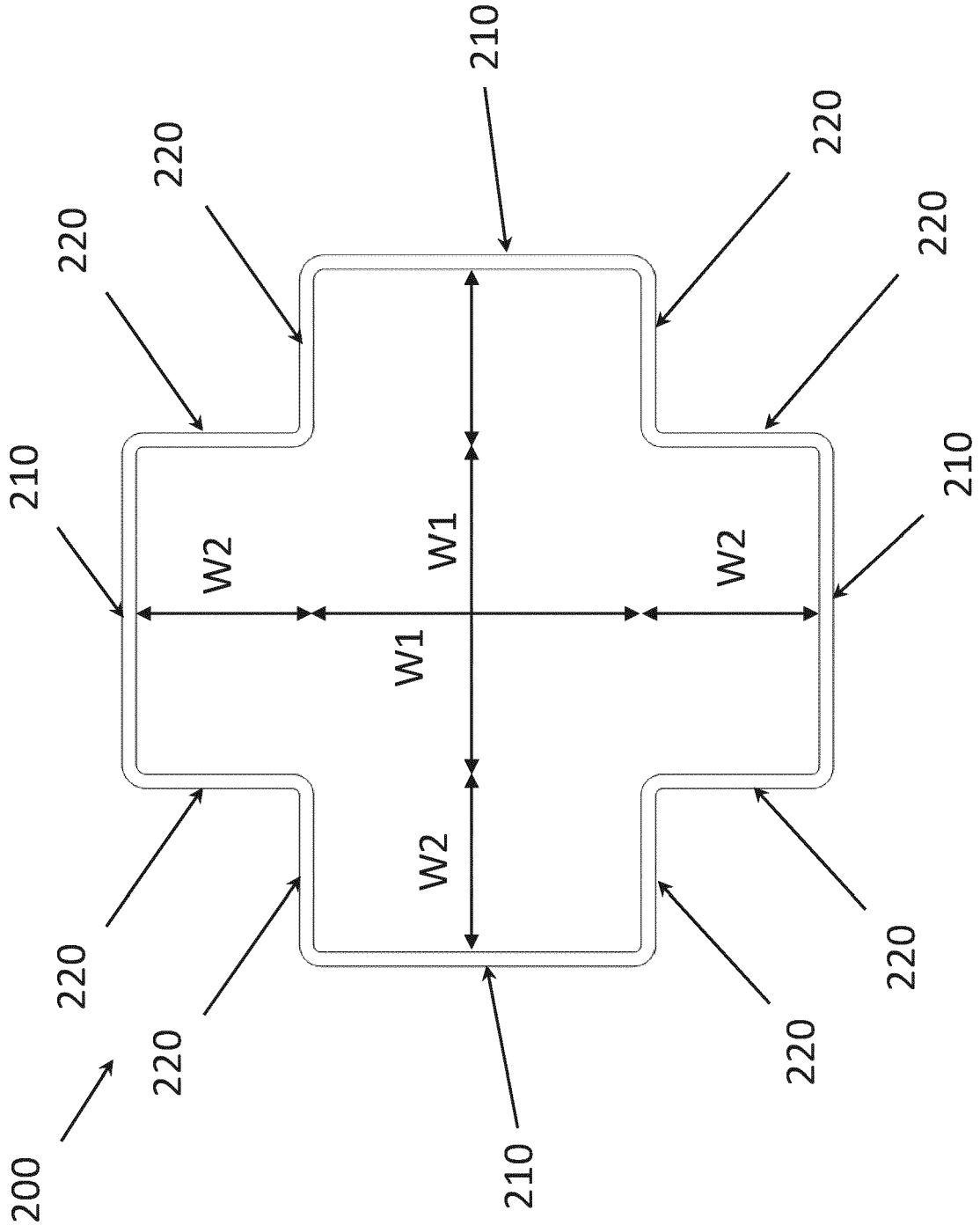

FIG. 13

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EUROPEAN SEARCH REPORT

Application Number
EP 21 15 2942

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 2011/067346 A1 (CHALKER LLOYD R [US] ET AL) 24 March 2011 (2011-03-24) * paragraph [0034] - paragraph [0043]; figures 7-15 * -----	1-15	INV. E04B1/24 E04B5/12 ADD. E04B1/26
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A	US 2015/040504 A1 (MEI EDMUND [US]) 12 February 2015 (2015-02-12) * paragraph [0135] - paragraph [0136]; figures 23, 24 * -----	1	
A	US 2011/146173 A1 (VISSER MICHAEL [US]) 23 June 2011 (2011-06-23) * paragraph [0010]; figure 1 * -----	1	

TECHNICAL FIELDS SEARCHED (IPC)

E04B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	16 June 2021	Galanti, Flavio

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16-06-2021

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