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DESCRIPTION

[0001] Traditionally, when erecting new-build structures, pitched roof structures are assembled onto the walls of a new building on site. The pitched roof structure includes timber roof rafters extending at an angle from timber beams fixed along the tops of the walls which they overhang at the roof eaves, up to the ridge where they support a substantially horizontally extending timber ridge board through a ridge tree fixed to the roof rafters.

[0002] An underlay, such as a breather membrane or roofing felt, is laid in overlapping sheets over the roof rafters and tiling battens are fixed to the roof rafters on top of the underlay in spaced apart substantially horizontal relationship. The spacing between the roof battens is dependent upon the length of the roof tiles between their head and tail. A tiler is employed to lay the tiles by fixing them on the battens in overlapping head to tail and side by side relationship, starting from the eaves and finishing at the ridge board.

[0003] Laying roof tiles on site is time consuming, because it is dependent *inter alia* upon suitable weather conditions, and the reliability of the tiler turning up for work. Quality control is also difficult to maintain on a building site, sometimes necessitating relaying of at least some of the roof tiles. These factors increase building industry costs, which is particularly relevant to the building industry in times of recession.

[0004] Consideration has been given to the concept of transporting an entire pre-assembled and pre-tiled roof structure to a building site, to be erected directly onto the walls of the structure. However, this is not practicable because of the size and weight of the pre-assembled roof structure.

[0005] DE 9414313(U1) describes a modular roof system in which a plurality of roof modules are individually constructed in an off-site location away from the building site. Each roof module is individually finished with roof coverings, such as roof tiles, and with other finishings, such as fascia board, guttering and so on. The modules are transported to the building site and are arranged side-by-side on the walls of the building to provide a finished roof.

[0006] Although such a modular system can reduce the on-site time required to build the roof structure, there are problems associated with the system. For example, there is very little tolerance for mismatch of the tiles at the join between the modules if the tiles are to provide an effective and leak-free roof covering. A mismatch between the tiles of even a few centimetres in any direction is sufficient to leave the roof susceptible to leaking, and in practice such mismatches are difficult to avoid. The result is that the finished roof is of inferior quality to that of a roof that is fully-constructed onsite.

[0007] US 5,092,099 discloses a method wherein each roof section is made individually, with a panel, which includes shingles, being applied to each individual section, and, after each section has been individually made, sections might optionally be arranged together at the

manufacturing facility.

[0008] Accordingly, it is an object of the invention to provide a pre-tiled pitched roof structure for erection on a building site which overcomes or at least substantially reduces the aforesaid disadvantages.

Statements of the invention

[0009] Against this background, and from a first aspect, the invention resides in a method of making a plurality of pre-tiled pitched roof sections for arrangement on the walls of a building. The method includes building a pitched roof structure having a plurality of separable sections, tiling the pitched roof structure in courses and separating the tiled pitched roof structure into a plurality of separate pre-tiled roof sections.

[0010] The pitched roof structure is therefore tiled as a single continuous structure before it is separated into the plurality of pre-tiled pitched roof sections. Thus, when the pre-tiled pitched roof sections are arranged on a building to form a tiled pitched roof, there is no risk of misalignment of the tiles, and hence no need for any adjustment or cutting of the tiles. Thus, the quality of the roof is maintained despite its modular nature. Furthermore, because there is no need to adjust or cut the tiles onsite, the services of a skilled tiler can be dispensed with altogether, or at least minimised. All of these factors contribute to reduced building costs and more consistent quality of construction.

[0011] The plurality of separable sections may be separable along one or more join lines that are generally parallel to rafters of the pitched roof structure. In this way, the separable sections can be easily separated with little disruption to the underlying roof structure.

[0012] Tiling the pitched roof structure may include arranging junction tiles over the join line, the junction tiles being removable from the pitched roof structure. In this way, tiles that are over the join line may be quickly and easily removed when required.

[0013] To facilitate access to the pitched roof structure once the pitched roof structure has been tiled, thereby facilitating separation of the separable sections, the method may include removing the junction tiles from the tiled roof structure before separating the tiled roof structure. Removing the junction tiles before separation of the tiled roof structure also reduces the risk of damage to the junction tiles during handling and transportation of the pre-tiled pitched roof sections, as the junction tiles would otherwise be exposed at outer edges of the pitched roof structure.

[0014] For particular ease of removal of the junction tiles, the method may include removing the junction tiles from the join line one-at-a-time, moving from a course of tiles at a ridge of the tiled roof structure to a course of tiles at an eave of the tiled roof structure.

[0015] The method may also include removing a ridge tile at the join line before separating the tiled roof structure.

[0016] Tiling the pitched roof structure may include laying ridge filler units at the ridge, and the method may include removing a ridge filler unit at the join line before separating the tiled roof structure. The ridge filler unit may be removed by sliding the ridge filler unit out from beneath a ridge tile in a sideways direction that is generally parallel to the ridge. In this way, the ridge filler unit may be easily removed from beneath the ridge tile, without the need to remove additional ridge tiles from the tiled roof structure.

[0017] To facilitate removal of the ridge filler unit by sliding, the ridge filler unit may include a slot that opens onto an edge of the ridge filler unit, the slot being co-operable with a lug of a neighbouring ridge filler unit.

[0018] For particular ease of manufacture, building the pitched roof structure may include building a plurality of sections and separably joining the sections together. Separably joining the sections together may include arranging a linking member between outer rafters of neighbouring sections, and separably joining the outer rafters to the linking member. The outer rafters may be joined to the linking member by means of a tie bar.

[0019] The method may include laying a roof underlay on each separable section, the roof underlay having an overlap portion that extends beyond an outer rafter of the section. In this way, the overlap portions can be overlapped in the finished roof structure to guard against the ingress of water beneath the underlay sections at the join between the roof sections.

[0020] To keep the overlap portions out of the way during tiling and separation of the pitched roof structure, the method may include fixing the overlap portion of the underlay to one or more battens of the section.

[0021] The invention extends further to a method of erecting a tiled pitched roof on the walls of a building, the method including making a plurality of pre-tiled pitched roof sections according to the method above, transporting the plurality of pre-tiled pitched roof sections to a building site and arranging the plurality of pre-tiled pitched roof sections on the walls of a building.

[0022] The method may include joining the plurality of pre-tiled pitched roof sections together along one or more join lines that are generally parallel to rafters of the pitched roof. In this way, the separable sections can be joined together particularly easily.

[0023] The method may include inserting at least one junction tile into at least one course of tiles over the or each join line and fixing the junction tile to the tiled pitched roof. The method may include inserting at least one junction tile into each course of tiles over the or each join line.

[0024] For particular ease of insertion of the junction tiles, The method may include inserting the or each junction tile into each course of tiles one-course-at-a-time, moving from a course of tiles at an eave of the tiled pitched roof to a course of tiles at a ridge of the tiled pitched roof.

[0025] To facilitate insertion of the junction tiles into the course of tiles even further, and to reduce the possibility of damage to the junction tile and surrounding tiles, the method may include adjusting a tile adjacent to the or each junction tile before inserting the respective junction tile into the course of tiles. The method may include loosening the tile adjacent to the or each junction tile sufficiently to facilitate insertion of the or each junction tile into the course of tiles.

[0026] To complete a ridge of the pitched tiled roof, the method may include fixing a ridge tile over the or each join line at a ridge of the roof.

[0027] The method may include fitting a ridge filler unit at the or each join line. The ridge filler unit may be fitted by sliding the ridge filler unit beneath a ridge tile in a sideways direction generally parallel to the ridge. In this way, the ridge filler unit may be fitted without the need to remove the ridge tile. To facilitate insertion of the ridge filler unit by sliding, the ridge filler unit may include a slot that opens onto an edge of the ridge filler unit, the slot being co-operable with a lug of a neighbouring ridge filler unit.

[0028] Joining the pre-tiled pitched roof sections together may include arranging a linking member between outer rafters of neighbouring pre-tiled pitched roof sections, and joining the outer rafters to the linking member. The pre-tiled pitched roof sections may be joined to the linking member by means of a tie bar.

[0029] Each pre-tiled pitched roof section may include a roof underlay, the roof underlay having an overlap portion that extends beyond an outer rafter of that section, and the method may include overlapping the overlap portions of neighbouring pre-tiled pitched roof sections. Overlapping the overlap portions of the underlay in this way guards against the ingress of water beneath the underlay at the join between the roof sections.

[0030] The method may include adhering the overlap portions together.

[0031] Each overlap portion may initially be removably fixed to a batten of its respective pre-tiled pitched roof section, and the method may include removing each overlap portion from its respective batten before overlapping the overlap portions.

Brief Description of the Drawings

[0032] In order that the invention may be more readily understood, reference will now be made, by way of example only, to the accompanying drawings, in which:

Figure 1 a is a perspective view of a pitched roof structure;

Figure 1b is a perspective view of the pitched roof structure of Figure 1 a split into three roof sections;

Figure 1c is a plan view of the join line between adjacent roof sections of the pitched roof structure of Figure 1a;

Figure 2 is a perspective view of the pitched roof structure of Figure 1 a that has been tiled to provide a tiled pitched roof structure;

Figure 3 is a perspective view of the tiled pitched roof structure of Figure 2 with junction tiles removed at the join line between adjacent roof sections;

Figure 4 is a perspective view of the pitched roof structure of Figure 3 when separated into a plurality of pre-tiled pitched roof sections;

Figure 5 is a perspective view of one of the pre-tiled pitched roof sections of Figure 4 arranged on the walls of a building;

Figure 6 is a perspective view of all the pre-tiled pitched roof sections of Figure 4 arranged on the walls of a building to form a partially-tiled pitched roof;

Figure 7 is a perspective view of the partially-tiled pitched roof of Figure 6 with the junction tiles replaced at one of the join lines between adjacent pre-tiled pitched roof sections;

Figure 8 is a perspective view of the partially-tiled pitched roof of Figure 7 with all the junction tiles replaced to form a fully-tiled pitched roof on the walls of the building;

Figures 9a to 9f illustrate a method of removing the junction tiles from a join line between adjacent roof sections;

Figures 10a to 10i illustrate a method of replacing the junction tiles at a join line between adjacent roof sections;

Figure 11 illustrates a conventional ridge filler unit for use in a conventional tiled pitched roof; and

Figure 12 illustrates an adapted ridge filler unit for use in the tiled pitched roof of Figure 8.

Detailed Description of Embodiments of the Invention

[0033] Figure 1 a illustrates a pitched roof structure 10 a pitched roof that lies beneath and supports tiles. The pitched roof structure 10 is therefore a sub-tile pitched roof structure that will hereafter be referred to for convenience simply as the roof structure 10. The roof structure

10 includes a plurality of rafters 12 extending from the ridge 16 of the roof structure 10 to its eave 18, and a plurality of battens 14 extending orthogonally with respect to the rafters 12.

[0034] The roof structure 10 includes three separable sections or roof modules 20, illustrated in Figure 1 b. In the example illustrated, the roof structure 10 is formed from three roof modules 20: a left roof module 20a, a central roof module 20b and a right roof module 20c. To produce the roof structure 10, the three roof modules 20 are separably joined together along join lines 21 that lie parallel to the rafters 12 (see Figure 1a).

[0035] Referring again to Figure 1a, the battens 14 extend across to width of a single roof module 20, and are truncated at outer rafters or joining rafters 12a that are provided at the end of each roof module 20. In this way, there is a gap between the neighbouring battens 14 at the join line 21 between the roof modules 20 that exposes ends 15 of the battens 14.

[0036] Figure 1c illustrates the boundary between two neighbouring roof modules 20 at the join line 21. Each roof module 20 includes at least one outermost joining rafter 12a that borders the join line 21 and faces an opposed joining rafter 12a of the neighbouring roof module 20. Specifically, as most clearly seen in Figure 1b, the left roof module 20a has a single joining rafter 12a at its right-most side, the right roof module 20c has a single joining rafter 12a at its left-most side, and the centre roof module 20b has two joining rafters 12a, one at each of its left and right sides.

[0037] Referring again to Figure 1c, a linking member in the form of a beam 13 is disposed in face-to-face relation between the joining rafters 12a of the neighbouring modules 20. The linking beam 13 is removably fixed to the two joining rafters 12a by a tie bar 24 that extends through the joining rafters 12a and the linking beam 13 sandwiched between them. The tie bar 24 can be removed when required to separate the modules 20.

[0038] A roof underlay 26 is disposed between the rafters 12 and the battens 14 of each section. The roof underlay 26 extends across the roof module 20, and also extends beyond the joining rafter 12a to provide an overlap portion 28. In the structure illustrated in Figure 1c, the overlap portion 28 of each roof module 20 is tacked to the ends 15 of the battens 14, so that the overlap section 28 lies clear of the join line, 21 ready for later separation of the roof modules 20. However, Figure 1c also shows how the overlap portions 28 may be released from the battens 14 to lie in overlapping relation over the linking beam 13 between the joining rafters, 12a whereupon a peel-to-stick butyl rubber strip 30 provided on the underside 32 of an upper overlap portion 28 seals against the upper side 34 of a lower overlap portion 28.

[0039] The roof structure 10 described is assembled at an off-site location such as a factory by joining together the three roof modules 20. The roof modules 20 are joined by sandwiching the linking beam 13 between the joining rafters 12a and fitting the tie bar 24 to secure the join. At this stage, the overlap portions 28 remain tacked to the ends 15 of the battens 14.

[0040] The roof structure 10 is then fully tiled and finished in the off-site location, as illustrated

in Figure 2. Specifically, tiles 34 are fixed to the battens 14 in courses 35 using fixings such as a steel screw. As is conventional in the art, the tiles 34 are fixed to the battens 14 one course 35 at a time, moving from the eave 18 to the ridge 16. First the eaves course 35a is laid, then the course 35b above the eaves course 35a is laid, and so on until the uppermost course 35c has been laid at the ridge line.

[0041] In each course 35 of tiles 34, a junction tile 36 is laid over each join line 21. These junction tiles 36 differ from the remaining roof tiles 34 in that they either remain unfixed to the batten 14 below, or are removably fixed to the batten 14. The junction tiles 36 can therefore be easily removed, as will be explained.

[0042] Once the tiles 34, 36 have been laid, ridge 16 is finished. Ridge filler units 40 (not visible in Figure 2, but visible in Figure 9b) are laid above the uppermost course 35c of tiles 34, and ridge tiles 38 are laid over the ridge filler units 40 to complete the ridge 16. Additional finishings such as fascia boards, guttering etc. (not shown) may also be fitted at this stage.

[0043] In this way, the entire roof structure 10 is fully tiled off-site to make a separable pre-tiled roof structure 50, shown in Figure 2.

[0044] As shown in Figure 3, once the separable pre-tiled roof structure 50 has been produced, the junction tiles 36 and ridge tile 38 are removed from the join line 21 between the roof modules 20 to allow the separable pre-tiled roof structure 50 to be separated into three pre-tiled roof sections or modules 60, shown in Figure 4. The pre-tiled roof structure 50 is separated by removing the tie bars 24 and linking beams 13 at each join line 21 (see Figure 1b), which are then stored for later re-use.

[0045] The pre-tiled roof modules 60 are transported to a building site where, as shown in Figures 5 and 6, they are arranged one-at-a-time on the walls 62 of a building 64. Once in place, the pre-tiled roof modules 60 are re-joined. To re-join the pre-tiled roof modules 60, the linking beam 13 is sandwiched between the joining rafters 12a of adjacent modules 50 and the tie bar 24 is arranged through the linking beam 13 and the two joining rafters 12a to secure the pre-tiled roof modules 60 (see Figure 1c). The overlap portions 28 of the roof underlay 26 are un-tacked from the end 15 of each batten 14, and the overlap portions 28 are arranged one-on-top-of-another to cover the join line 21, secured in place by the peel-to-stick butyl strip 30.

[0046] Once the pre-tiled roof modules 60 have been re-joined, the junction tiles 36 and ridge tiles 38 are replaced at the join line 21 as shown in Figure 7. After all the junction tiles 36 have been replaced, the erection of the tiled pitched roof is complete, and the building 64 has a finished, tiled pitched roof 70, shown in Figure 8.

[0047] The invention therefore provides a pre-tiled roof structure 50 that can be separated into pre-tiled roof modules 60 that are small enough to be transported from an off-site location such as a factory to an on-site location such as a building site, for re-assembly on the walls 62 of a building 64. The on-site time needed to erect the tiled pitched roof 70 is greatly reduced

compared to assembling an entire roof structure on the building 64 from scratch, because on-site tile-laying process is limited to only a small number of junction tiles 36 at the join line 21.

[0048] Furthermore, because the underlying roof structure 10 is tiled in its entirety at an off-site location before it is separated into the three pre-tiled roof modules 60, the tiles 34 are already in alignment with one another across the join lines 21 between neighbouring pre-tiled roof modules 60. In this way, when the pre-tiled roof modules 60 are arranged on the walls 62 of the building 64 there is no risk of mis-alignment of the tiles 34 across the join lines 21, and hence no need for any adjustment or cutting of the junction tiles 36. Quality is therefore maintained, weather conditions are less of a limitation and the services of a skilled tiler can be dispensed with altogether, or at least minimised.

[0049] The process of removing the junction tiles 36 from the join line 21 of the tiled roof structure 50 will now be described in further detail with reference to Figures 9a to 9e. In the embodiment illustrated, the tiles 34, 36 are double-cambered plain tiles of the sort illustrated in the Applicant's UK registered design number 2089250, although it will be appreciated that any suitable tiles may be used.

[0050] Referring to Figure 9a, the join line 21 is first identified. Tiles that lie on the join line 21 are junction tiles 36 that will be removed.

[0051] Next, as shown in Figure 9b the ridge tile 38 that lies on the join line 21 is removed by unscrewing the ridge tile 38 from the ridge timber 39. A left ridge filler unit 40a is then removed from beneath the left-hand adjacent ridge tile 38a and, as shown in Figure 9c, a right ridge filler unit 40b is removed from beneath the right-hand adjacent ridge tile 38b, as shown in Figure 9c. The ridge filler units 40a, 40b are removed by sliding in a sideways direction that is generally parallel to the ridge 16. The ridge filler units 40a, 40b are specially adapted to permit removal by this sliding movement, as will be later described.

[0052] The upper-most junction tile 36 is then removed from the join line 21, as shown in Figure 9d. Each junction tile 36 is removed, working down the join line 21, until all the junction tiles 36 have been removed, as shown in Figure 9e.

[0053] The roof structure 50 can now be separated into the pre-tiled roof modules 60, which are transported to the building site, and re-joined on the walls 62 of a building 64 as has already been described.

[0054] The method of replacing the junction tiles 36 to produce the finished pitched roof 70 will now be described with reference to Figures 10a to 10i.

[0055] As shown in Figure 10a, the junction tile 36 of the eaves course 35a of tiles 34 is firstly slid into place over the join line 21 and is fixed to the underlying batten 14 with a steel screw. Next, as shown in Figure 10b, a tile clip 42 is placed on the exposed end of the tile 34 to the right of the join line 21 in the course 35b above the eaves course 35a.

[0056] An adjacent tile 37 that lies to the left of the join line 21 is loosened by loosening the screw 37a or other fixing that attaches the adjacent tile 37 to the underlying rafter 14, as shown in Figure 10c. In this way, the loosened adjacent tile 37 can be adjusted to permit insertion of a junction tile 36 into that course 35b of tiles 34. The junction tile 36 is then fixed to the rafter 14 with a screw and the adjacent tile 37 is re-secured to the batten 14 by tightening the fixing.

[0057] Referring now to Figure 10d, the replacement of the junction tiles 36 then continues in the same manner for each course 35 of tiles 34 in turn moving upwardly from the eave (not visible in Figure 10d) to the ridge 16, by applying the tile clip 42 to the tile 24 to the right of the join line 21, loosening the adjacent tile 37 to the left of the join line 21, sliding in the junction tile 36 and fixing the junction tile to the batten 14 below, and finally re-securing the adjacent tile 37 to the batten 14. As shown in Figure 10e, once the last junction tile 36 of the uppermost course 35c of tiles 34 has been fixed in place, all the junction tiles 36 at the join line 21 have been replaced, and the ridge 16 can be finished.

[0058] To finish the ridge 16, the left ridge filler unit 40a is firstly slid into place under the ridge tile 38a to the left of the join line 21. Next, as shown in Figure 10f, the right ridge filler unit 40b is slid into place under the ridge tile 38b to the right of the join line 21. The ridge filler units 40a, 40b are slid beneath the ridge tiles 38a, 38b in a sideways direction that is generally parallel to the ridge 16.

[0059] Referring to Figure 10g, ridge-to-ridge seals 44 are then placed against exposed ends of the ridge tiles 38. Finally, as shown in Figure 10h, the missing ridge tile 38 is fitted in place over the join line 21 and secured to the ridge timber 39 (see Figure 10g). The process is repeated for any additional join lines 21 to give the finished pitched roof 70 on the walls 62 of the building 64, shown in Figure 10i.

[0060] The ridge filler units 40a, 40b in the region of the join line 21 are specially adapted so as to permit easy reinsertion of the ridge filler units 40a, 40b beneath the ridge tiles 38, as will now be explained with reference to Figures 11 and 12.

[0061] Figure 11 illustrates a conventional ridge filler unit 140, which is an elongate strip of plastic material. A left side 146 of the ridge filler unit 140 includes an elongate aperture 147. A right side 148 of the ridge filler unit includes lugs (not visible) on the undersurface of the ridge filler unit 140. The lugs are co-operable with the aperture 147 of a neighbouring ridge filler unit 140.

[0062] To fix neighbouring ridge filler units 140 together, the right side 148 of a first ridge filler unit 140 is lapped over the left side 148 of a neighbouring ridge filler unit 140 with the lugs and the aperture 147 aligned. The right side 148 of the first ridge filler unit 140 is then pushed downwardly so that the lugs are locked into the aperture 147 with a push-fit. To separate neighbouring ridge filler units 140 that are fixed together, the right side 148 of the ridge filler

unit must be pulled upwardly, away from the left side 146 of the neighbouring ridge filler unit 140, so as to pull the lugs out of engagement with the aperture 147.

[0063] Figure 12 illustrates the adapted ridge filler unit 40, which is also visible in Figures 10e and 10f. The adapted ridge filler unit 40 differs from the conventional ridge filler unit 40 in that at the left side 46 of the ridge filler unit 40 the aperture is replaced with an elongate slot 47 that opens onto the left edge 46a of the ridge filler unit 40. The provision of a slot 47 rather than an aperture allows the left side 46 of the ridge filler unit 40 to be slid under the right side 48 of a neighbouring ridge filler unit 40 such that the lugs can be slid into and out of the slot 47.

[0064] Thus, to remove the adapted ridge filler unit 40 as the pre-tiled roof structure 50 is prepared for separation, the left side 46 of the ridge filler unit 40 can simply be slid out from beneath the right side 48 of a neighbouring ridge filler unit 40, moving the slot 47 out of engagement with the lugs. Conversely, to replace the adapted ridge filler unit 40 as the pre-tiled roof sections 60 are re-joined, the left side 46 of the ridge filler unit 40 can simply be slid back beneath the right side 48 of the neighbouring ridge filler unit 40, thereby sliding the slot 47 back into engagement with the lugs.

[0065] It will be appreciated that the arrangement of the lugs and the slot may be reversed, such that the lugs are arranged on the right side of the ridge filler unit and the slot is arranged on the left side of the ridge filler unit.

[0066] Although in the embodiments described the roof structure is made of three separable sections or roof modules, it will be appreciated that the roof structure may be made of any suitable number of sections, which may be of any suitable size or shape.

[0067] In some embodiments, the linking beam may be omitted, and the joining rafters may be joined together directly. The joining rafters, and linking beam if used, need not be joined together by means of a tie bar, but may be joined together by any suitable joining means. A plurality of tie bars or other joining means may be used. The overlapping portions of the roof underlay may be tacked to the rafters by any suitable means, and may be

[0068] In the illustrated embodiment, a single junction tile is removed from each course of tiles over the join line. However, if required, there may be more than one junction tile that is removed from each course of tiles. In the embodiment illustrated the adjacent tiles to the left side of the join line are loosened to facilitate reinsertion of the junction tiles. However, adjacent tiles to the right side of the join line may be loosened instead of, or in addition to, the adjacent tiles to the left side of the join line.

[0069] The present invention is not limited to the exemplary embodiments described above and many other variations or modifications will be apparent to the skilled person without departing from the scope of the present invention as defined in the following claims.

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- DE9414313U1 [0005]
- US5092099A [0007]

PATENTKRAV

1. Fremgangsmåde til fremstilling af en flerhed af præteglbelagte sadeltagssektioner (60) til anbringelse på væggene af en bygning, hvilken fremgangsmåde indbefatter bygning af en sadeltagstruktur (10) med en flerhed af adskillelige sektioner (20), teglbelægning af tegltagstrukturen (10) i række og adskillelse af den teglbelagte sadeltagstruktur (50) i en flerhed af separate præteglbelagte tagsektioner (60).
5
2. Fremgangsmåde ifølge krav 1, hvor flerheden af adskillelige sektioner (20) kan adskilles langs én eller flere samlingslinjer (21), der er generelt parallelle med tegltagstrukturens lægter (14).
- 10 3. Fremgangsmåde ifølge krav 2, hvor teglbelægningen indbefatter anbringelse af samlingstegl (36) over samlingslinjen (21), hvor samlingsteglene (36) kan fjernes fra tegltagstrukturen (10), og hvor fremgangsmåden indbefatter fjernelse af samlingsteglene (36) fra den teglbelagte tagstruktur (50) før adskillelse af den teglbelagte tagstruktur (50).
4. Fremgangsmåde ifølge krav 3, hvor teglbelægningen indbefatter lægning af rygningstudfyldningsenheder (40) ved rygningen (16), og hvor fremgangsmåden indbefatter fjernelse af en rygningstegl (38) og en rygningstudfyldningsenhed (40) ved samlingslinjen (21) før adskillelse af den teglbelagte tagstruktur.
15
5. Fremgangsmåde ifølge et hvilket som helst foregående krav, hvor bygning af tegltagstrukturen (10) indbefatter bygning af en flerhed af sektioner (20) og separat samling af sektionerne (20) med hinanden.
20
6. Fremgangsmåde ifølge krav 5, hvor separat samling af sektionerne (20) med hinanden indbefatter anbringelse af et forbindelselement (15) mellem ydre lægter (14) af tilstødende sektioner (20) og separat samling af de ydre lægter (14) med forbindelselementet (15), eventuelt ved hjælp af en forbindelsesstang (24).
- 25 7. Fremgangsmåde ifølge krav 5 eller krav 6, hvor fremgangsmåden indbefatter lægning af et tagunderlag (26) på hver adskillelige sektion (20), hvilket tagunderlag (26) har en overlappende del (28), der strækker sig ud over en ydre lægte (14) af sektionen (20).
8. Fremgangsmåde til fremstilling af et teglbelagt sadeltag (50) på væggene af en bygning, hvilken fremgangsmåde indbefatter fremstilling af en flerhed af præteglbelagte sadeltagssektioner (60) ifølge fremgangsmåden i krav 1 til 7, transport af flerheden af præteglbelagte sadeltagssektioner (60) til en byggegrund og anbringelse af flerheden af præteglbelagte sadeltagssektioner (60) på væggene (62) af en bygning (64).
30
9. Fremgangsmåde ifølge krav 8, hvor fremgangsmåden indbefatter samling af flerheden af præteglbelagte sadeltagssektioner (60) med hinanden langs én eller flere samlingslinjer (21),

der generelt er parallelle med sadeltagets lægter (14).

10. Fremgangsmåde ifølge krav 9, der indbefatter indsætning af mindst én samlingstegl (36) i mindst én række tegl (34) over samlingslinjen eller hver samlingslinje (21) og fastgørelse af samlingsteglen (36) til det teglbelagte sadeltag (60).
- 5 11. Fremgangsmåde ifølge krav 10, der indbefatter justering af en tegl (34) stødende op til samlingsteglen eller hver samlingstegl (36) inden indsætning af den tilsvarende samlingstegl (36) i rækken af tegl (34) ved at løsne teglen (34) stødende op til samlingsteglen eller hver samlingstegl (36) tilstrækkeligt til at lette indsætning af samlingsteglen eller hver samlingstegl (36) i rækken af tegl (34).
- 10 12. Fremgangsmåde ifølge krav 10 eller krav 11, hvor fremgangsmåden indbefatter: fastgørelse af en rygningstegl (38) over samlingslinjen eller hver samlingslinje (21) ved en rygningstegl (16) af taget; og påsætning af en rygningsudfyldningsenhed (40) ved samlingslinjen eller hver samlingslinje (21).
- 15 13. Fremgangsmåde ifølge et hvilket som helst af kravene 9 til 12, hvor samling af de præteglbelagte sadeltagssektioner (50) med hinanden indbefatter anbringelse af et forbindelselement (15) mellem ydre lægter (14) af tilstødende præteglbelagte sadeltagssektioner (50), og samling af de ydre lægter (14) med forbindelselementet (15), hvilken fremgangsmåde eventuelt indbefatter samling af de præteglbelagte sadeltagssektioner (50) med forbindelselementet (15) ved hjælp af en forbindelsesstang (24).
- 20 14. Fremgangsmåde ifølge et hvilket som helst af kravene 9 til 13, hvor hver præteglbelagt sadeltagssektion (50) indbefatter et tagunderlag (26), hvilket tagunderlag (26) har en overlappende del (28) der strækker sig ud over en ydre lægte (14) af denne sektion (50), og indbefatter overlappning af de overlappende dele (28) af tilstødende præteglbelagte sadeltagssektioner (50).
- 25 15. Fremgangsmåde ifølge krav 14, hvor hver overlappende del (28) indledningsvist fastgøres til en lægte (14) af dens tilhørende præteglbelagte sadeltagssektion (50), og hvor fremgangsmåden indbefatter fjernelse af hver overlappende del (28) fra dens tilsvarende lægte (14) for overlappning af de overlappende dele (28).

DRAWINGS

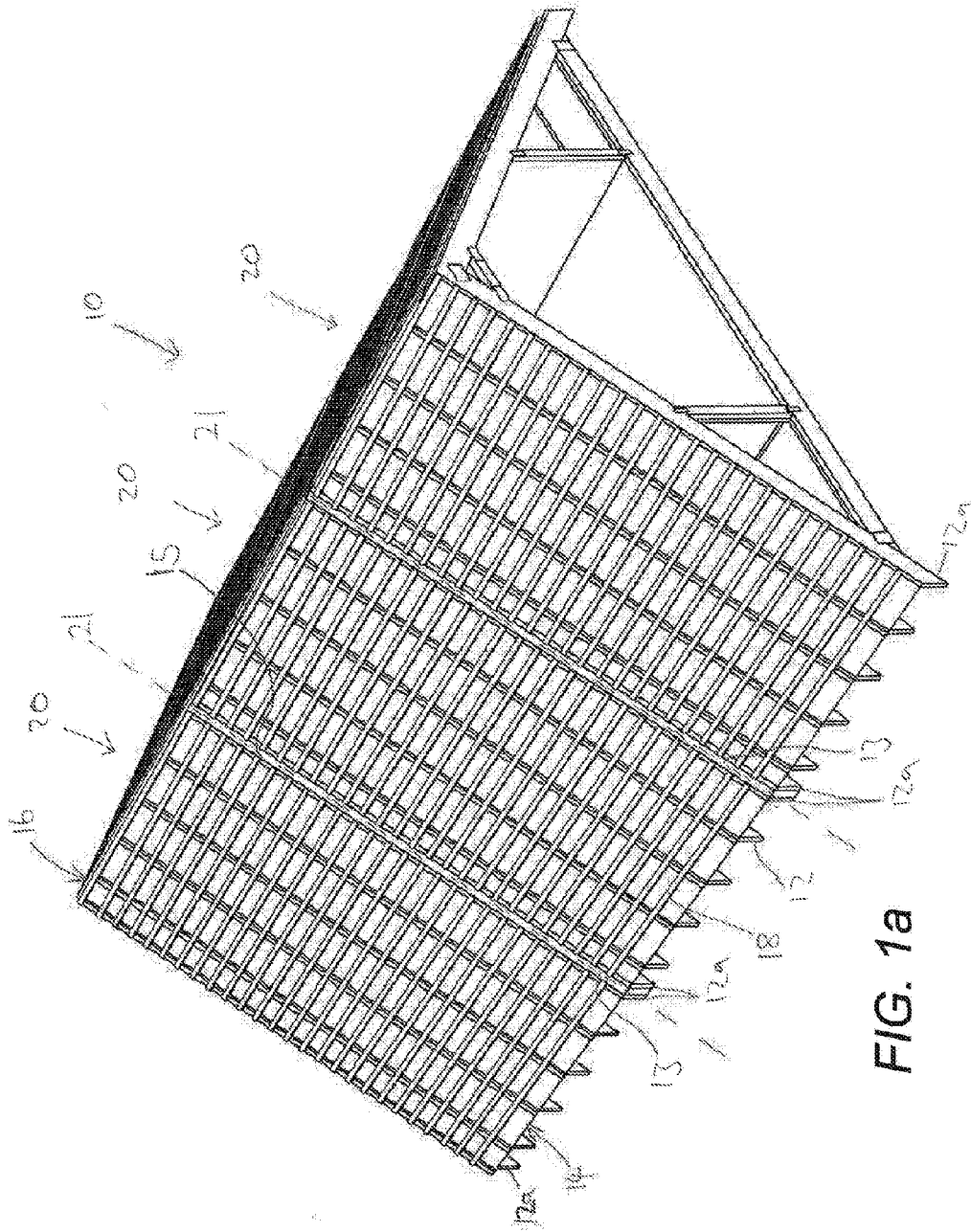


FIG. 1a

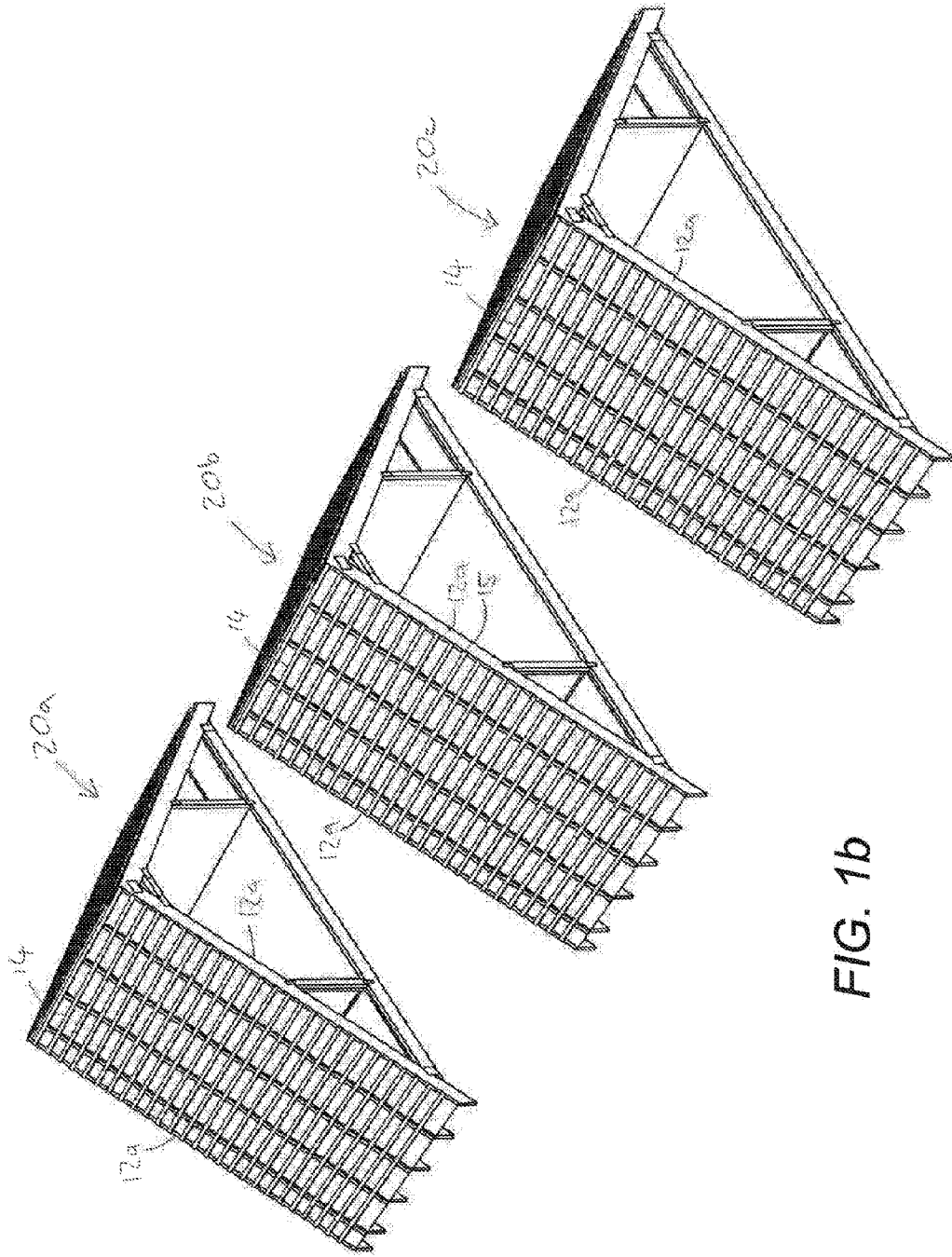


FIG. 1b

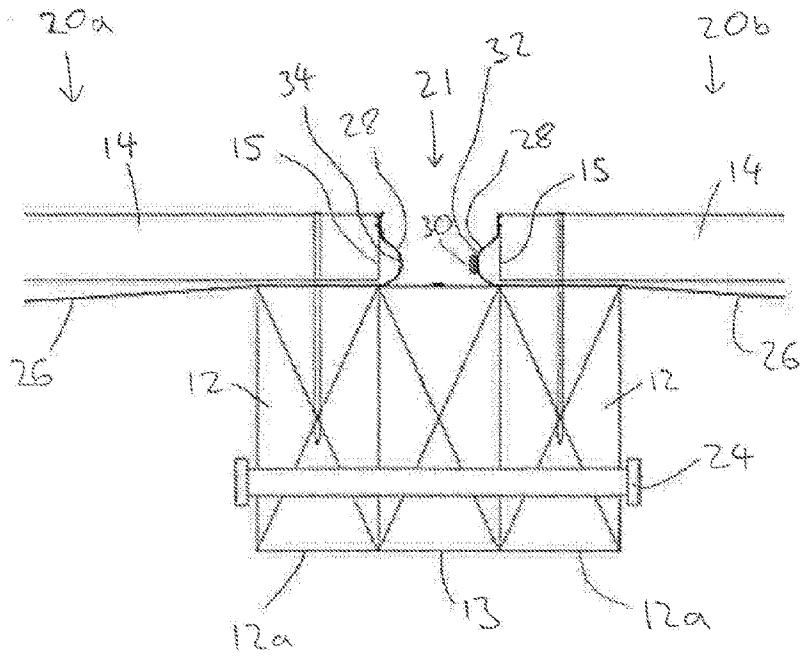


FIG. 1c

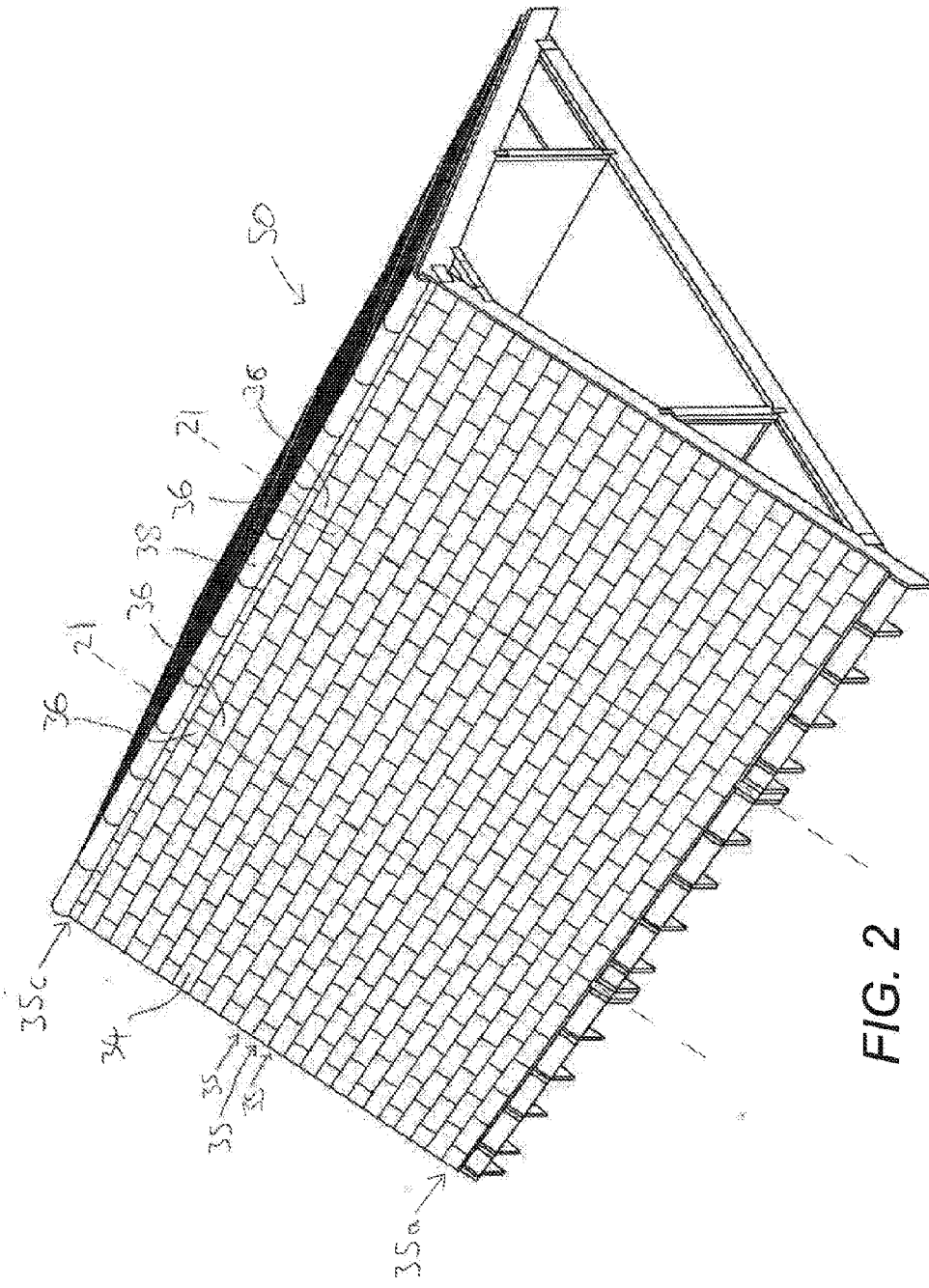


FIG. 2

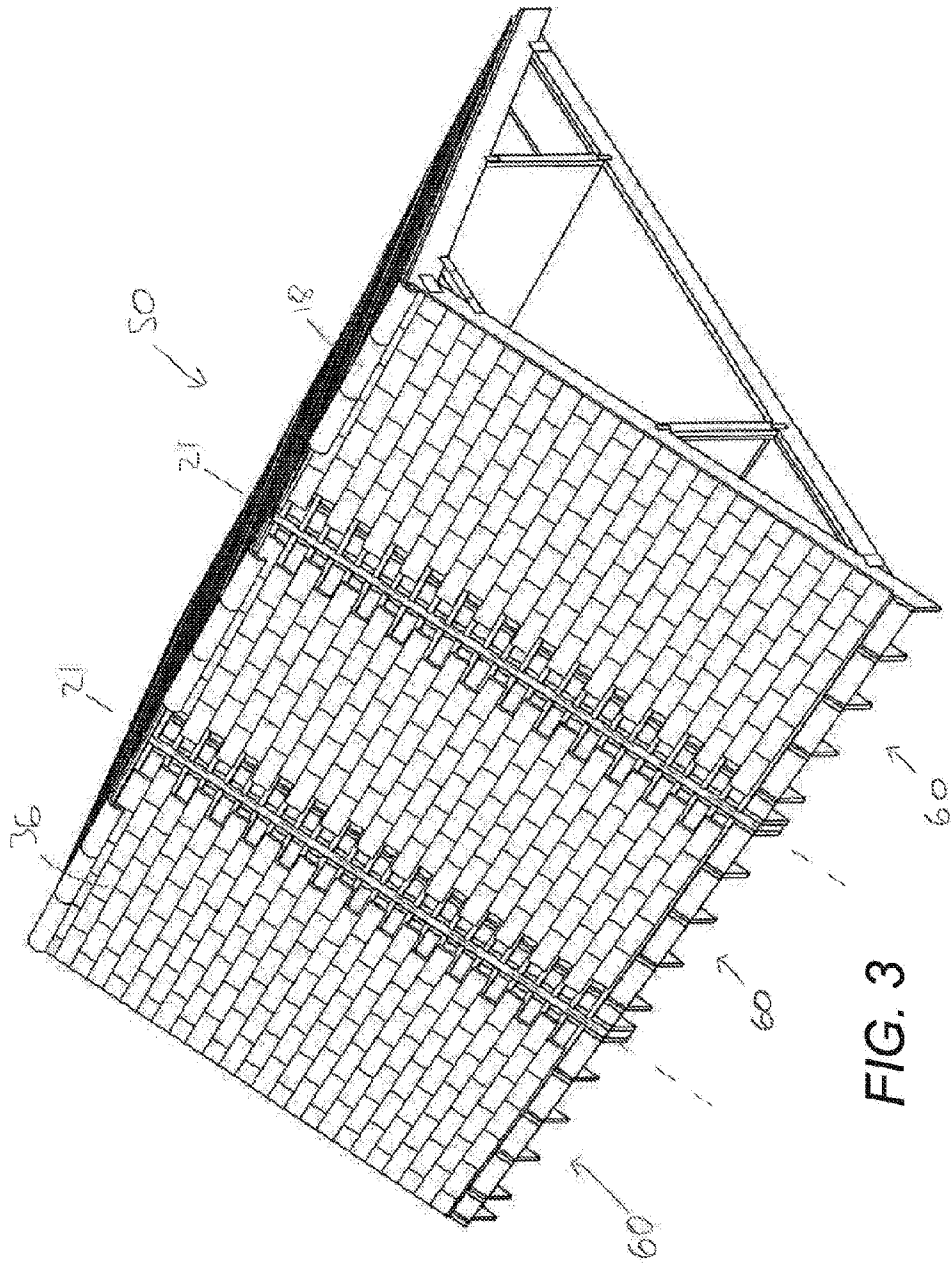


FIG. 3

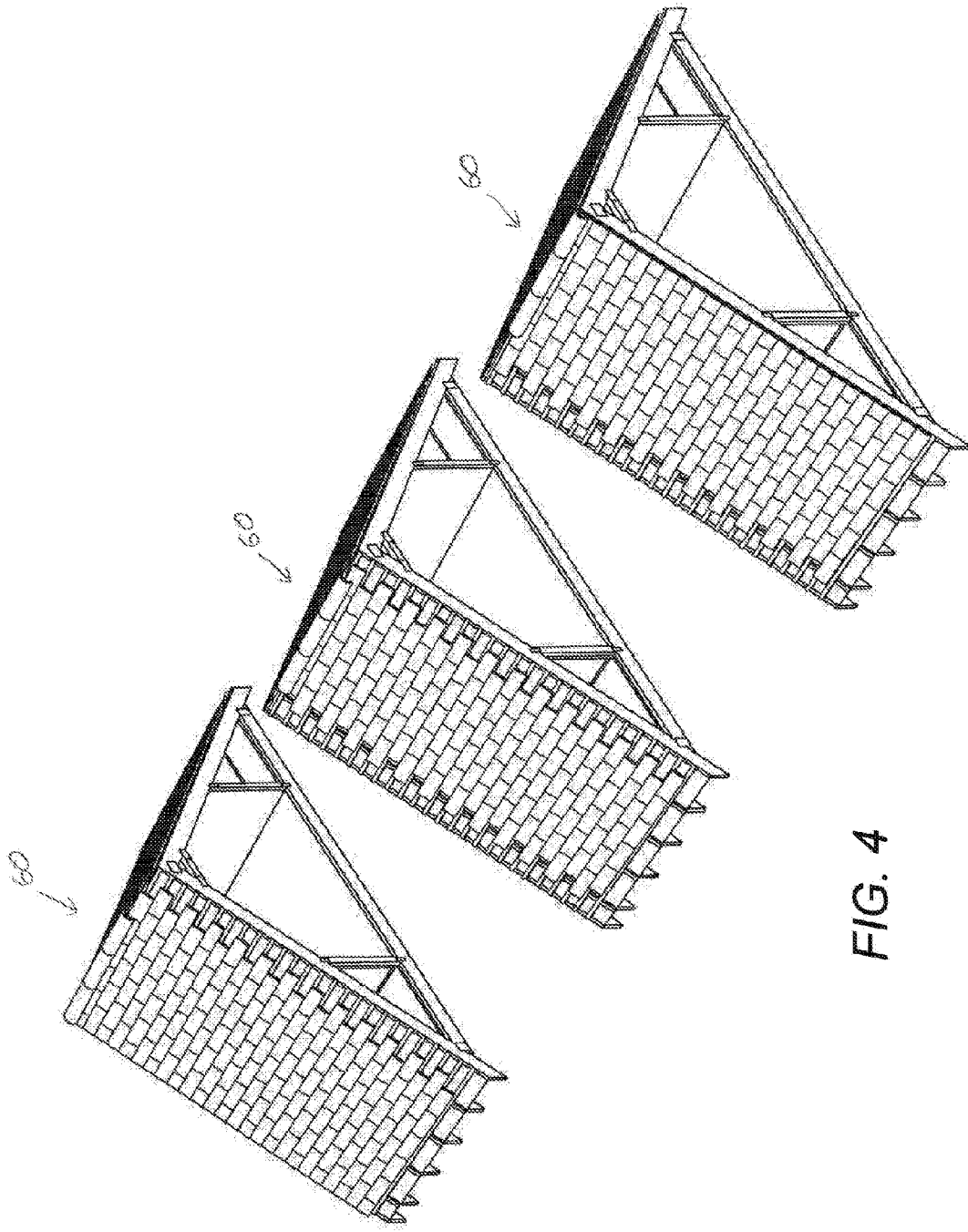


FIG. 4

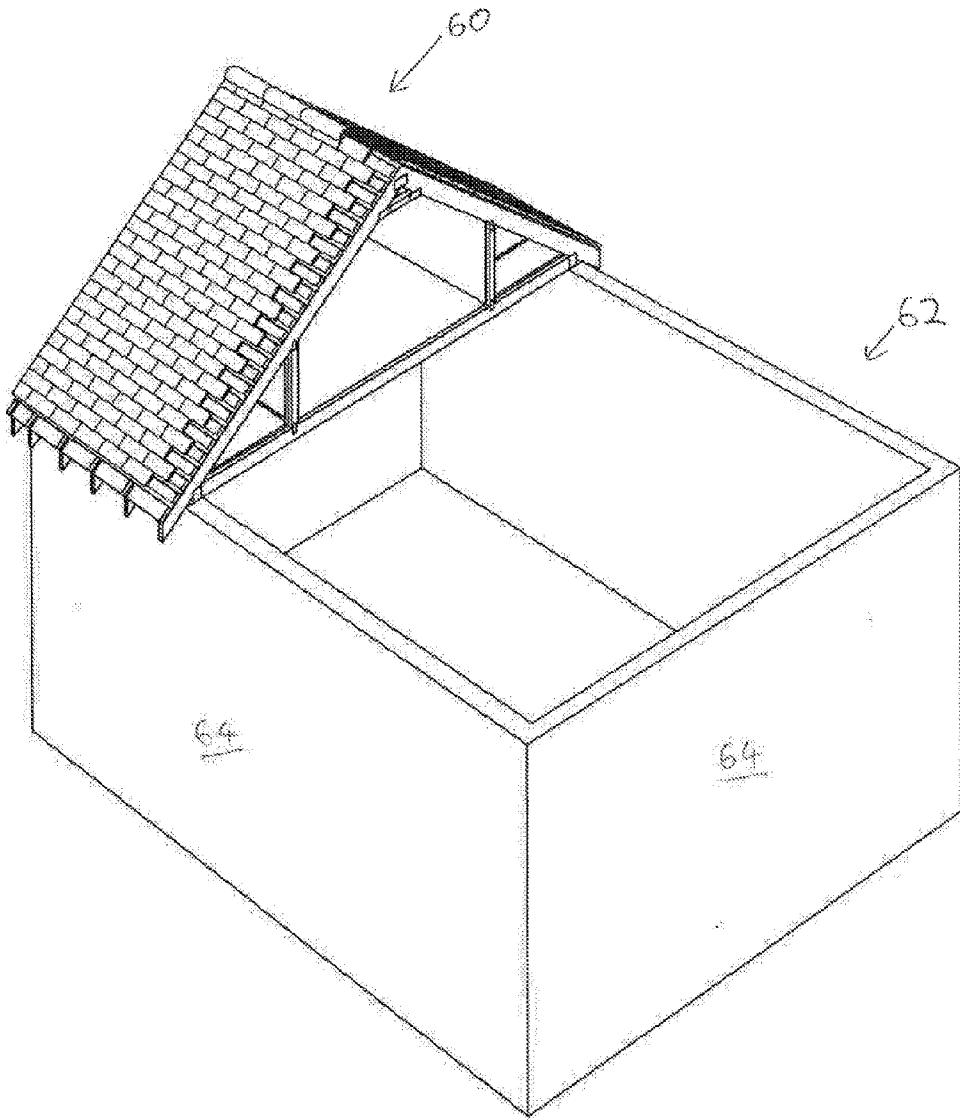


FIG. 5

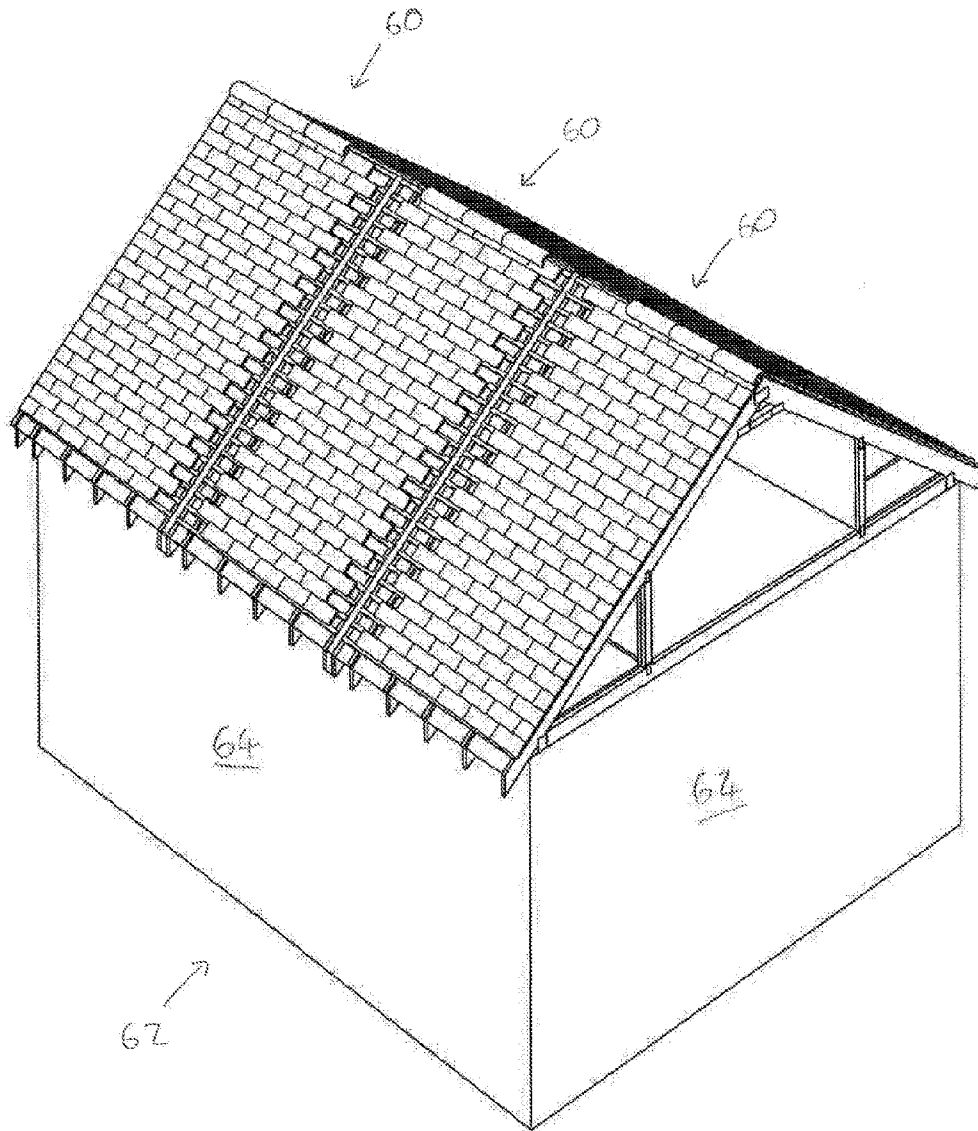


FIG. 6

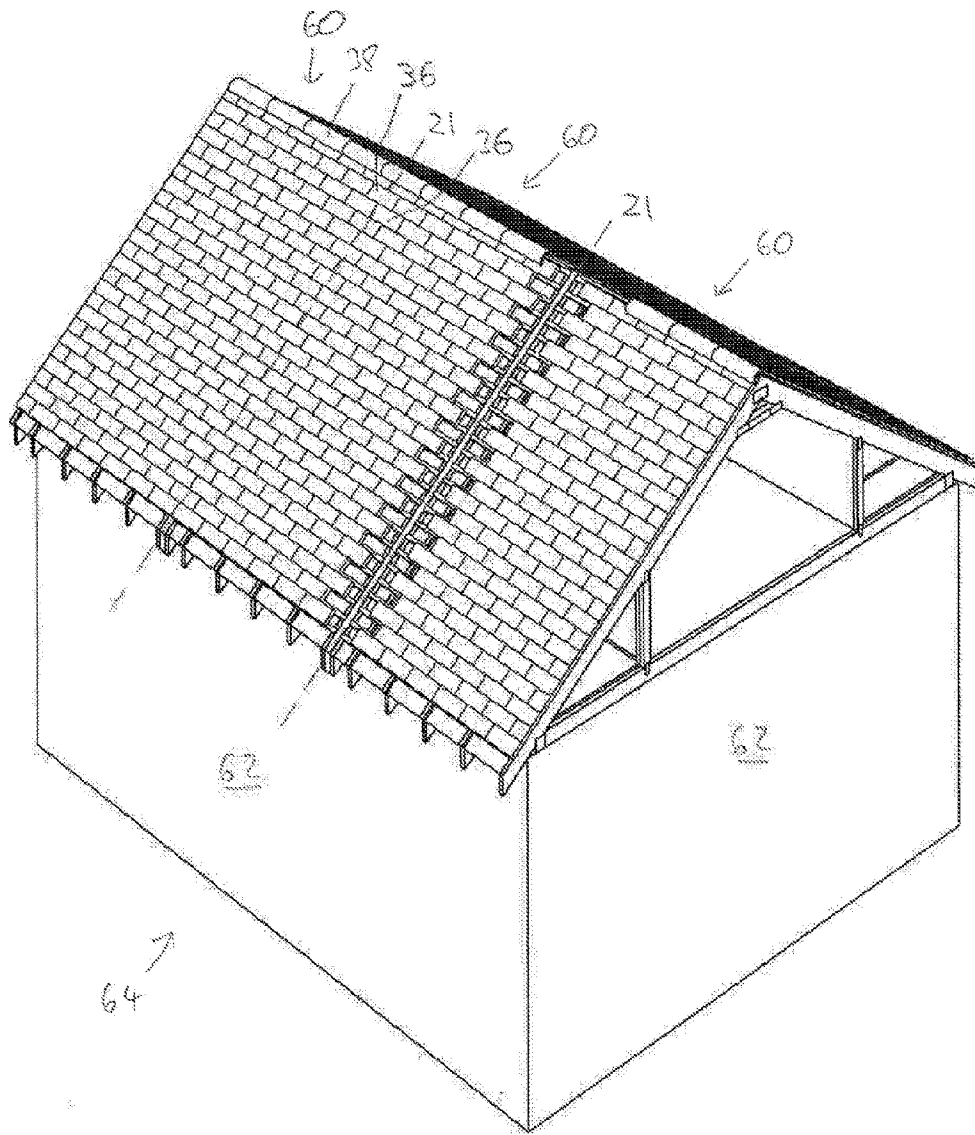


FIG. 7

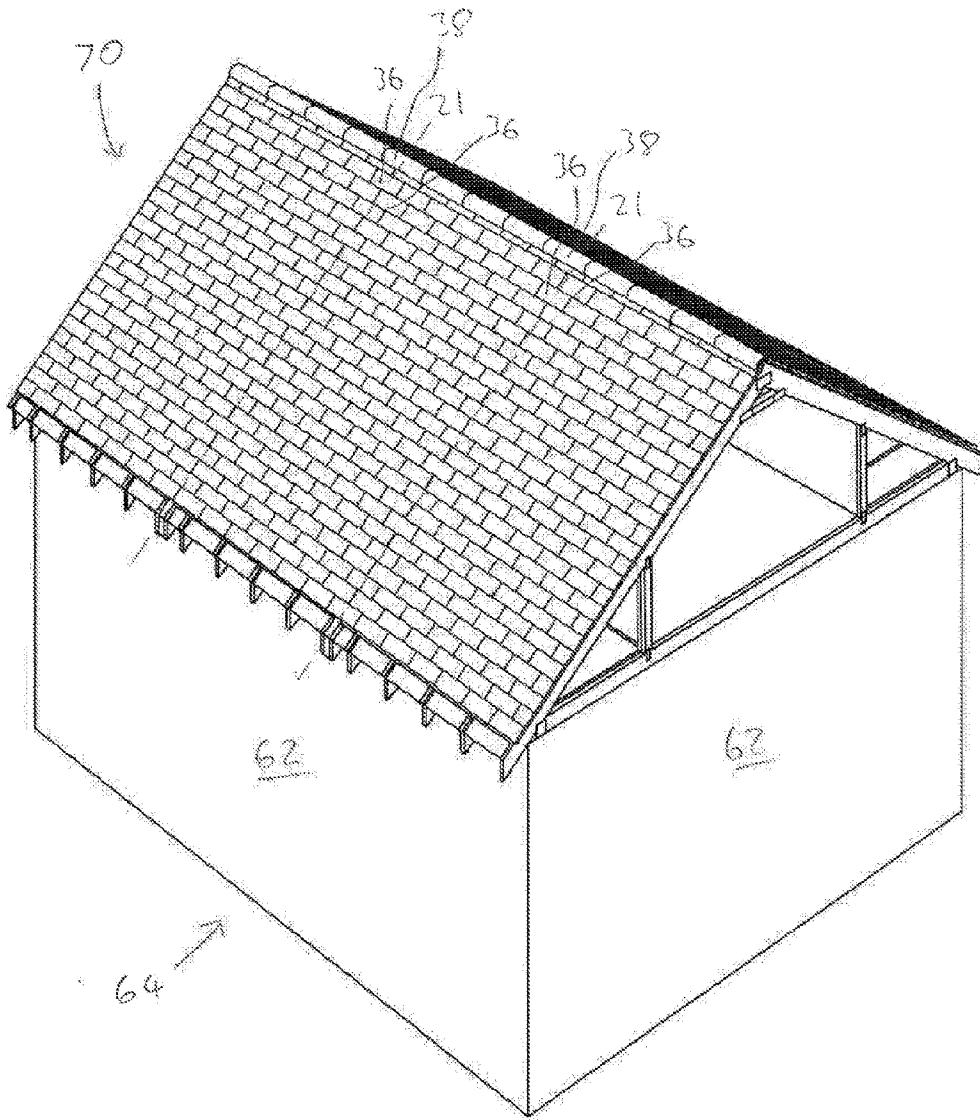


FIG. 8

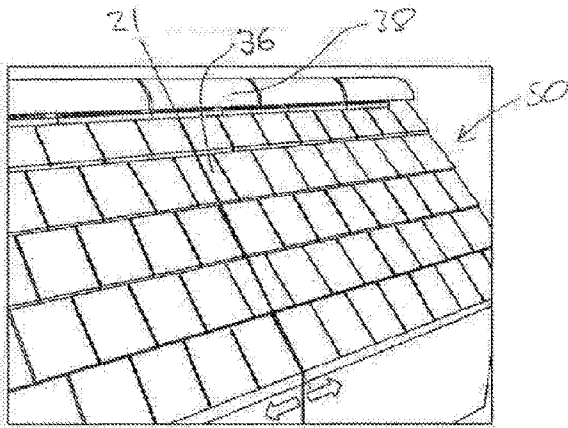


FIG. 9a

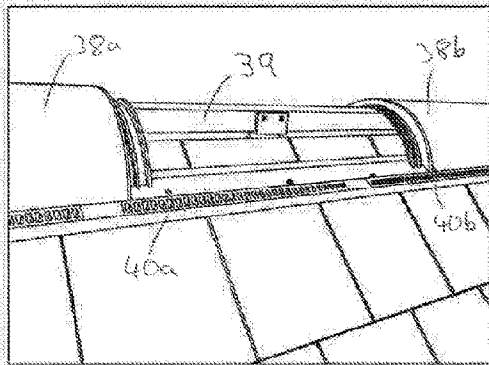


FIG. 9b

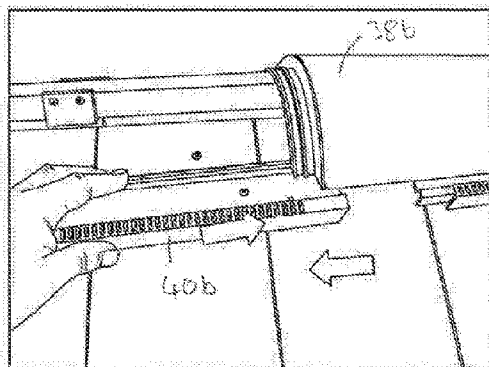


FIG. 9c

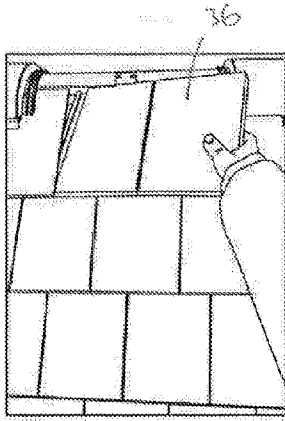


FIG. 9d

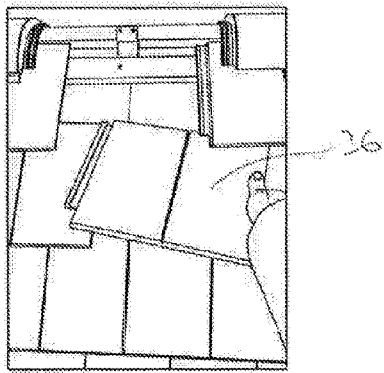


FIG. 9e

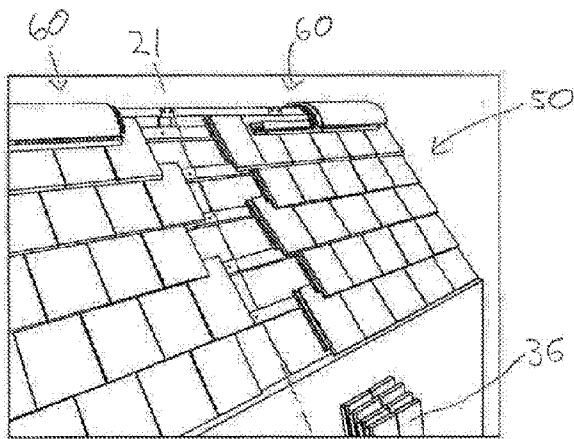


FIG. 9f

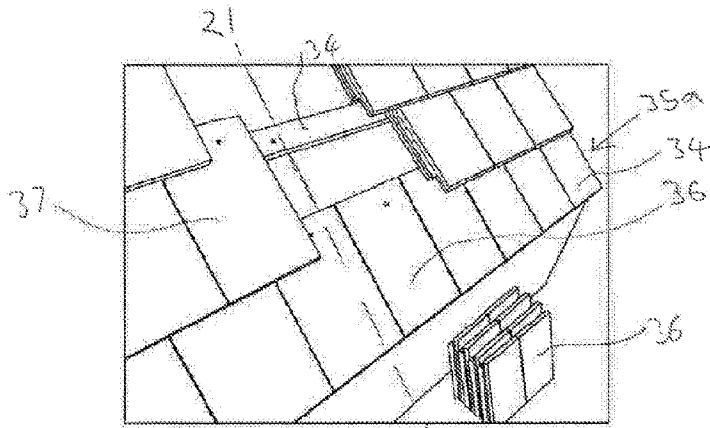


FIG. 10a

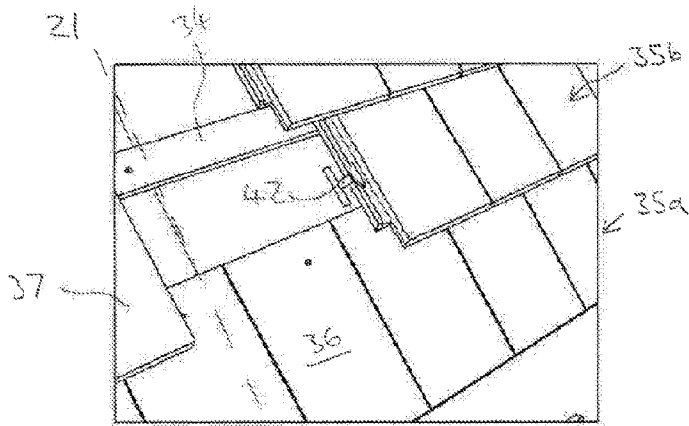


FIG. 10b

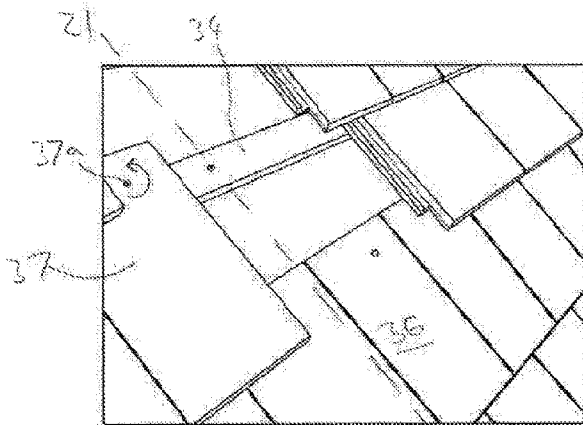
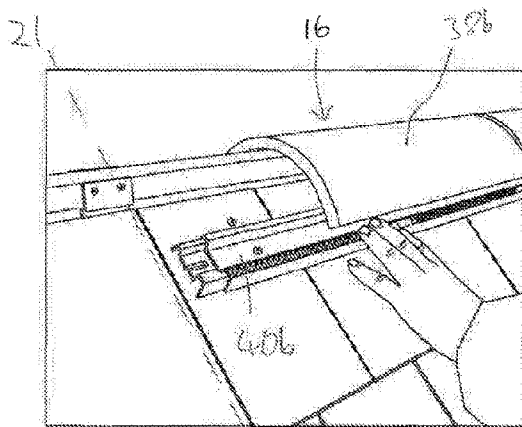
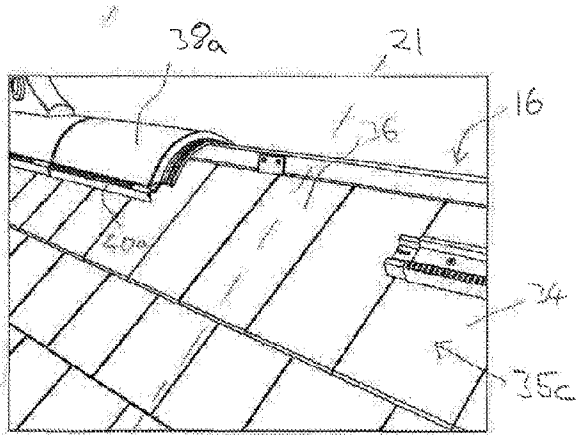
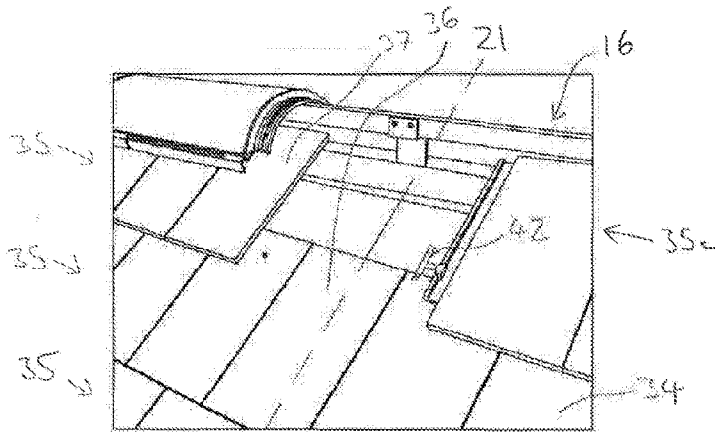


FIG. 10c



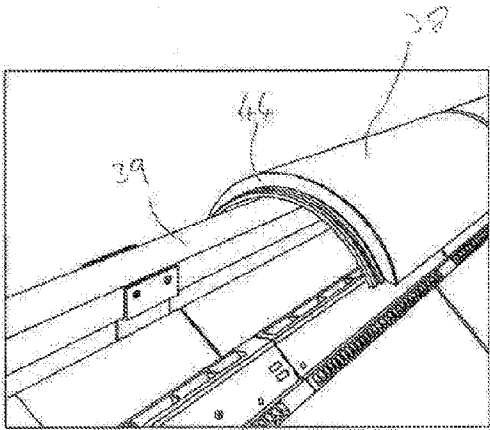


FIG. 10g

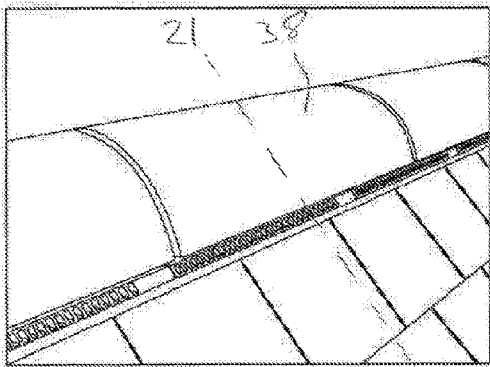


FIG. 10h

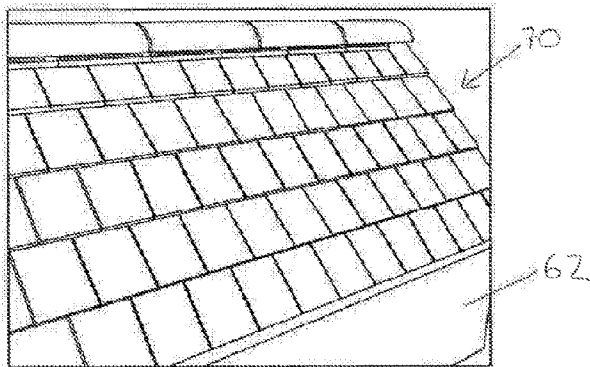


FIG. 10i

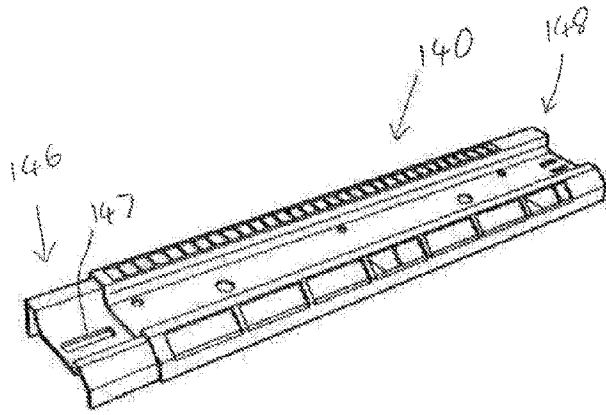


FIG. 11

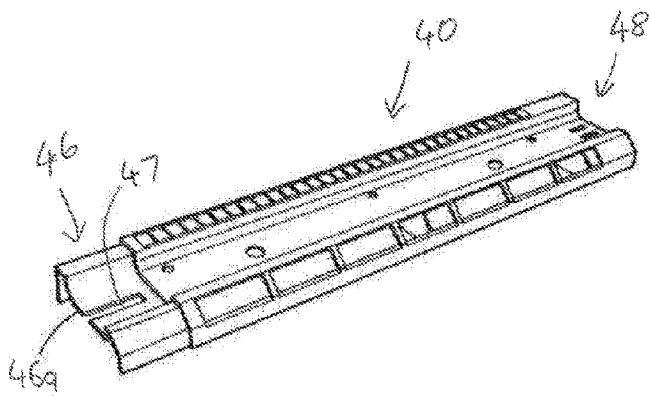


FIG. 12