IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Steven Brekke
Serial No. 14/555,049
Filed November 26, 2014
Confirmation No. 3403
For HANGER FOR FIRE SEPARATION WALL
Examiner Keith Minter

Art Unit 3635

October 17, 2017

AMENDMENT C

TO THE COMMISSIONER FOR PATENTS,

In response to the Office action mailed July 17, 2017, please enter the following amendments and consider the following remarks.

Listing of Claims begins on page 2 of this paper.

Remarks begin on page 6 of this paper.

Simpson Strong-Tie Company EX1088
Simpson v. Columbia
PGR2024-00050

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A hanger for connecting a structural component to a wall adapted to have sheathing mounted thereon, the hanger comprising:

a channel-shaped portion configured to receive the structural component;

an extension portion extending from the channel-shaped portion and configured to extend through the sheathing to engage the wall at a first location, the extension portion including extension flanges extending from the channel-shaped portion, each of the extension flanges being configured to extend through the sheathing; and

a connection portion configured for attachment to the wall at a second location spaced from the first location;

wherein the extension flanges include edges, each of the edges having ~~a small~~ an edge surface area, and major surfaces, each of the major surfaces having a ~~larger~~ major surface surface area ~~than the edges~~, the major surface surface area being greater than the edge surface area, the major surfaces of the extension flanges being in opposed face-to-face relation and directly engaging each other along a juncture between the connection portion and the channel-shaped portion, the edges of the extension flanges being free of engagement with each other.

2. (Withdrawn) A hanger as set forth in claim 1, wherein the channel-shaped portion is disposed with respect to the extension portion to mount the structural component generally orthogonal to the wall.

3. (Original) A hanger as set forth in claim 1, wherein the channel-shaped portion is disposed with respect to the extension portion to mount the structural component at a non-orthogonal angle relative to the wall.

4. (Cancelled)

5. (Previously presented) A hanger as set forth in claim 1, wherein the major surfaces of the extension flanges are configured to engage each other along a juncture positioned within the sheathing.

6. (Previously presented) A hanger as set forth in claim 1, wherein each of the extension flanges includes a driving point configured to be inserted into the sheathing, the driving point extending vertically when the hanger is attached to the wall.

7. (Original) A hanger as set forth in claim 1, wherein the connection portion includes connector tabs configured to overlie and engage a top plate of the wall.

8. (Original) A hanger as set forth in claim 1, wherein the extension portion includes back flanges configured to engage the wall at said first location.

9. (Original) A hanger as set forth in claim 1, wherein the channel-shaped portion includes a base sized and shaped for receiving the structural component thereon and side panels extending upward from the base, each of the side panels including fastening structure for use in attaching the hanger to the structural component.

10. (Withdrawn) A hanger as set forth in claim 9, wherein the channel-shaped portion further includes back panels, each of the back panels extending from a respective one of the side panels.

11. (Cancelled)

12. (Original) A hanger as set forth in claim 1 in combination with a slot template for cutting a slot in the sheathing configured to receive the extension portion of the hanger.

13-20. (Cancelled)

21. (Previously presented) A hanger as set forth in claim 1, wherein the channel-shaped portion, extension portion, and connection portion are formed as a one-piece construction such that the channel-shaped portion is fixed in position relative to the connection portion.

22. (Cancelled)

23. (New) A hanger as set forth in claim 1 wherein the channel-shaped portion includes a base sized and shaped for receiving the structural component thereon and side panels extending upward from the base, the extension flanges being substantially perpendicular to the base.

24. (New) A hanger as set forth in claim 23 wherein the connection portion includes connector tabs configured to overlie and engage a top plate of the wall, the connector tabs being parallel to the base, and perpendicular to the side panels and the extension flanges.

25. (New) A hanger for connecting a structural component to a wall adapted to have sheathing mounted thereon, the hanger comprising:

a channel-shaped portion configured to receive the structural component, the channel-shaped portion including a base, side panels extending from opposite edges of the base, the base, and side panels being sized and arranged to receive an end of the structural component;

extension flanges extending from the channel-shaped portion;

a connection portion configured for attachment to the wall, the connection portion including a top flange and a back flange, the top flange and back flange being non-coplanar, the top flange extending in a direction away from the extension flanges and the back flange and being configured to attach to a top surface of the wall, the back flange extending from an edge of the top flange and along an edge of the extension flange, the back flange being secured to the extension flange and configured to engage a side surface of the wall; and

wherein the extension flanges connect channel-shaped portion and the connection portion and space the channel-shaped portion apart from the connector portion.

26. (New) A hanger as set forth in claim 25, wherein the extension flanges define planar surfaces in opposed face-to-face relation between the connection portion and the channel-shaped portion.

27. (New) A hanger as set forth in claim 26, wherein the planar surfaces of the extension flanges engage with each other along a juncture positioned between the connection portion and channel-shaped portion.

28. (New) A hanger as set forth in claim 25, wherein the extension flanges space the channel-shaped portion from the connection portion by an amount equal to or greater than a thickness of the sheathing.

REMARKS

Claim 1 is amended and claims 23-28 are added. Claims 4, 11, 13-20 and 22 were previously cancelled. Claims 2 and 10 were previously withdrawn. Claims 1-3, 5-10, 12, 21 and 23-28 will be pending upon entry of this amendment. Rejoinder of claims 2 and 10 is requested upon the allowance of claim 1 from which claims 2 and 10 depend..

Applicant regrets the inadvertent misidentification of status of claims 21 and 22 in Amendment B. However, as the status is correctly identified here and the examination has proceeded on claim 21, as was intended. Accordingly, no further action is believed to be necessary.

Claim Rejections - 35 U.S.C. §112

Claim 1 has been amended to delete reference to a "small" surface area and a "larger" surface area. Accordingly, the rejection of claims 1, 3, 5-9, 12 and 21 should be withdrawn.

Claim Rejections – 35 U.S.C. § 102

Claims 1, 3-9, 11, and 12 are rejected under pre-AIA 35 U.S.C. 103 as being obvious in view of U.S. Patent No. 6,463,711 (Callies) and U.S. Publication No. 2015/0167291 (Bundy).

Claim 1 recites, a hanger for connecting a structural component to a wall adapted to have sheathing mounted thereon, the hanger including,

> a channel-shaped portion configured to receive the structural component;
>
> an extension portion extending from the channel-shaped portion and configured to extend through the sheathing to engage the wall at a first location, the extension portion including extension flanges extending from the channel-shaped portion, each of the extension flanges being configured to extend through the sheathing; and
>
> a connection portion configured for attachment to the wall at a second location spaced from the first location;
>
> wherein the extension flanges include edges, each of the edges having an edge surface area, and major surfaces, each of the major surfaces having a major

surface surface area, ***the major surface surface area being greater than the edge surface area, the major surfaces of the extension flanges being in opposed face-to-face relation and directly engaging each other along a juncture between the connection portion and the channel-shaped portion, <u>the edges of the extension flanges being free of engagement with each other</u>***.

A feature of the present invention as set forth in the Background, is the construction of the hanger for maintaining a fire rating between walls, such as in multi-family dwellings. In order to do this, there needs to be very little interruption in the fire wall material (e.g., gypsum board). However, at the same time, the hanger must be able to support the substantial weight of a floor or other truss, plus its share of any load on the floor truss. The present invention includes construction to facilitate this feature.

By way of a non-limiting example, hanger 126 mounts a floor truss 12 to a wall 28. In particular, the hanger 126 is configured to mount the floor 12 is a skewed position relative to the wall 28. The hanger 126 includes a channel-shaped portion 138, an extension portion 140, and a connection portion 142 all of which are formed as a one-piece structure. More particularly, the extension portion 140 includes extension flanges 160a, 160b. The extension flanges 160a, 160b include thin edges that have a small surface area and major surfaces what have a larger surface area. The major surfaces are in opposed face-to-face relation and directly engaging each other along a juncture between the connection portion 142 and the channel-shaped portion 138. As a result, the extension portion 140 is very thin so that only a very small slit through the firewall board is required to connect to the wall 28. Moreover, the construction provides the strength needed to transfer the load from the channel-shaped portion 138 to the connection portion 142.

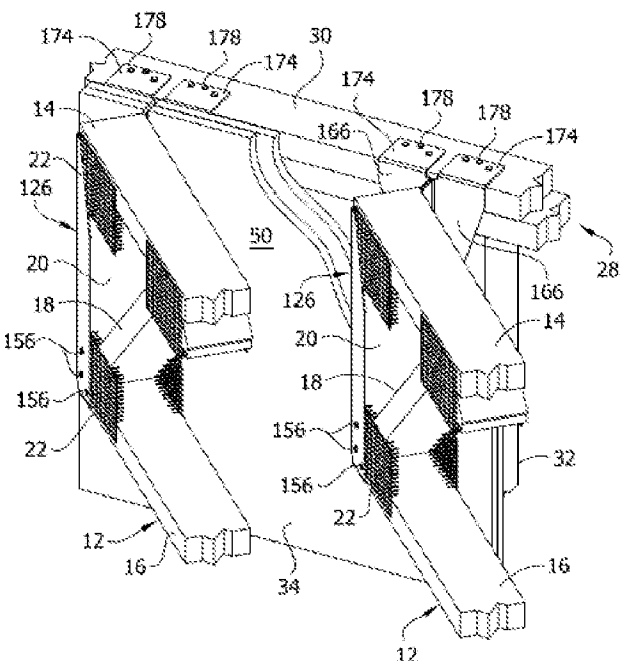


FIG. 26

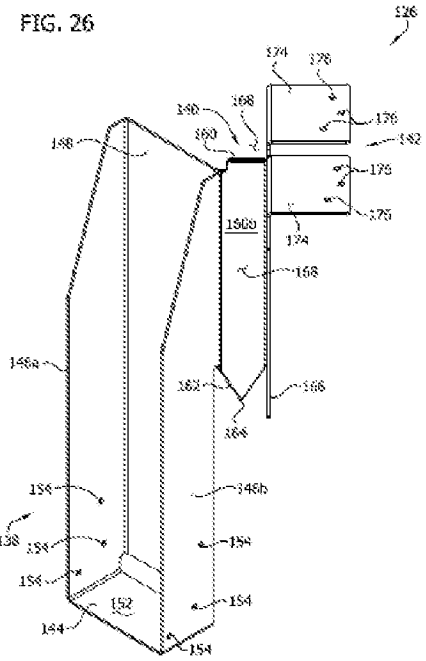
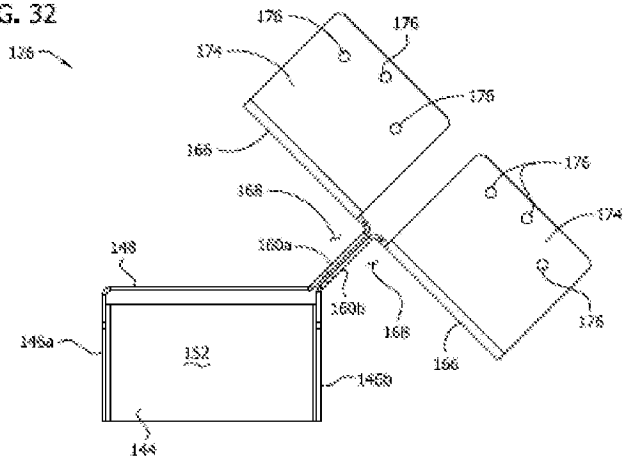


FIG. 32



Claim 1 is submitted as nonobvious and patentable over the combination of Callies and Bundy in that neither show or suggest a hanger including extension flanges that include edges, each of the edges having an edge surface area and major surfaces, each of the major surfaces having a major surface surface area, the major surface surface area being greater than the edge surface area, the major surfaces of the extension flanges being in opposed face-to-face relation and directly engaging each other along a juncture between the connection portion and the channel-shaped portion, the edges of the extension flanges being free of engagement with each other

U.S. Patent No. 6,463,611 (Callies) describes a construction hanger shown in Fig. 3 of Callies reproduced below. The construction hanger includes a flange portion 22 and a hanger

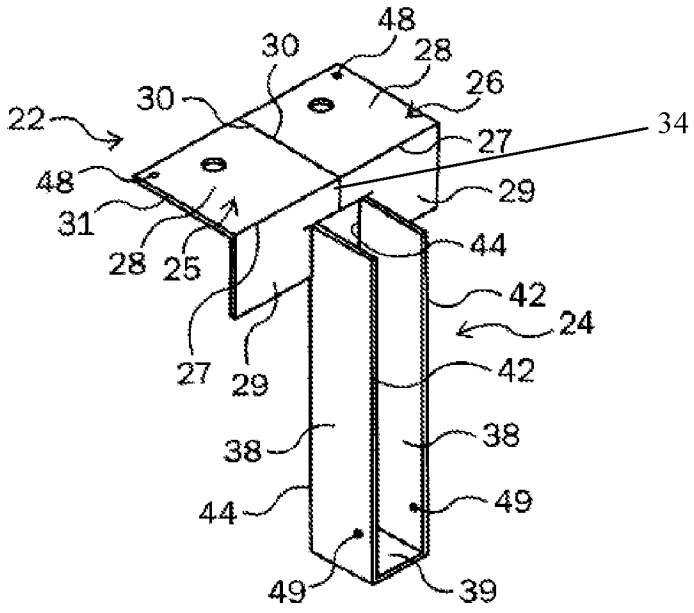


Fig. 3

portion 24. More particularly the flange portion 22 includes first and second flange members 25, 26, each including a top flange 28 for engagement with a top face 19 of a supporting member. Because the flange portion 22 is made in two pieces (members 25, 26), thin edges of the flange members 25, 26 abut each other. The major surfaces of the flange members 25, 26 do not engage each other anywhere. However, the flange portions 22 include inner edges 30 having edge portions 34 that abut each other. Callies, 4:20-24. There is no disclosure or suggestion in Callies that only a portion of inner edges 30 (which includes inner edge portions 34) may engage each other.

As best understood, the Office has taken the position that inner edge 30 of Callies is a "major surface" and that "inner edge portion" 34 is and edge having an edge surface area.[1] Presumably, inner edge portion 34 has a lesser surface that the part of inner edge between flange members 26, 28 because inner edge portion appears shorter in length. Inner edge portion 34 has

[1] Applicant submits that the inner edge 30 of Callies is not the broadest ***reasonable*** interpretation of the term major surface. As understood by the person of ordinary skill in the art, a major surface would never be considered a segment of a thin edge of an otherwise broad, flat piece. The burden of proof for such an extraordinary departure from common understanding of the mean of a major surface should lie with the Office.

been added to Fig. 3 above for simplicity, but is shown in Fig. 6 of Callies. Claim 1 as amended requires the edges of the extension portion to be "free of engagement with each other." Accordingly, the inner edges portions 34 of Callies cannot constitute edges having an edge surface area less than a major surface surface area of major surfaces, as required by claim 1, because the inner edge portions 34 engage each other. Again, Callies contains no disclosure or suggestion that only a portion of the inner edge 30 (including inner edge portion 34) may be engaged.

Bundy[2] was cited as teaching an extension portion 41 including extension flanges 15 configured to extend through sheathing. It also fails to show or suggest the claimed extension flanges having major surfaces with a larger surface area than edges of the extension flanges, where the major surfaces of the extension flanges are in opposed face-to-face relation and directly engage each other along a juncture between the connection portion and the channel-shaped portion, and the edges are free of engagement with each other. Accordingly, the combination of Bundy and Callies fails to render claim 1 obvious.

Claims 2-10, 12, 21, 23 and 24 depend from claim 1 and are patentable over the cited reference for at least the same reasons as claim 1. New claims 23 and 24 provide additional details of construction of the hanger not shown or suggested by Callies and Bundy.

New Claims 25-28

New claim 25 is directed to a hanger comprising:

a channel-shaped portion configured to receive the structural component, the channel-shaped portion including a base, side panels extending from opposite edges of the base, the base, and side panels being sized and arranged to receive an end of the structural component;

extension flanges extending from the channel-shaped portion;

a connection portion configured for attachment to the wall, the connection portion including a top flange and a back flange, the top flange and back flange being non-coplanar, the top flange extending in a direction away from the

[2] Bundy also fails to show or suggest "extension flanges . . . configured to extend through the sheathing." Reference numeral 15 is to a flange. Reference numeral 41 is to a surface of the flange. Neither the flange 15 nor any surface 41 of the flange is shown or remotely suggested as configured to extend through the sheathing 6. In fact, they are shown and described above the sheathing. Paragraph [0011] says nothing to the contrary. Claim 1 is patentable for this additional reason.

extension flanges and the back flange and being configured to attach to a top surface of the wall, ***the back flange extending from an edge of the top flange and along an edge of the extension flange***, the back flange being secured to the extension flange and configured to engage a side surface of the wall; and

wherein the extension flanges connect channel-shaped portion and the connection portion and space the channel-shaped portion apart from the connector portion.

Claim 25 is submitted as nonobvious and patentable over Callies and Bundy in that neither of them show or suggest an extension portion that connects a channel-shaped portion and a connection portion, and spaces the channel shaped portion and connecting portion. Thus, the top flanges ***and*** back flanges must be spaced from the channel-shaped portion. These references do not contemplate providing a space insert one or more sheets of drywall between the back flanges of the connector portions and the channel-shaped portions. Moreover, there is no showing of a back flange extending from an edge of a top flanges and along an edge of the extension flange.

Callies shows a connection portion back flange 29 that abuts the channel-shaped portion 24. Bundy shows back flanges 21 that engage the channel-shaped portion 11,12. Accordingly, these references fail to show or suggest an extension portion that spaces a back flange and top flanges from a channel-shaped portion.

Accordingly, claim 25 is nonobvious and patentable over Callies and Bundy. Claims 26-28 depend directly or indirectly from claim 25 and are submitted as patentable for the same reasons as claim 25. In addition, these claims provide additional features that have not been shown to be described in the art.

CONCLUSION

Favorable consideration and allowance of claims 1-3, 5-10, 12, 21 and 23-28 is respectfully requested. The Commissioner is hereby authorized to charge any fee necessary in the pendency of this application to Deposit Account No. 19-1345.

Respectfully submitted,

/Kurt F. James/

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KFJ/ldd

Electronic Acknowledgement Receipt

EFS ID:	30682592
Application Number:	14555049
International Application Number:	
Confirmation Number:	3403
Title of Invention:	HANGER FOR FIRE SEPARATION WALL
First Named Inventor/Applicant Name:	Steven Brekke
Customer Number:	321
Filer:	Kurt F. James/Laura Davis
Filer Authorized By:	Kurt F. James
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		03286044.PDF	173149 b319ad03a37201f388cda0b353cf2802ba6a00ea	yes	12

	Multipart Description/PDF files in .zip description		
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	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	5
	Applicant Arguments/Remarks Made in an Amendment	6	12
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New International Application Filed with the USPTO as a Receiving Office

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PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/555,049	Filing Date 11/26/2014	☐ To be Mailed

ENTITY: ☑ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $80 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $420 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

AMENDMENT	10/17/2017	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 17	Minus	** 20	= 0		x $80 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	*** 3	= 0		x $420 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	Moliki I May
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

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