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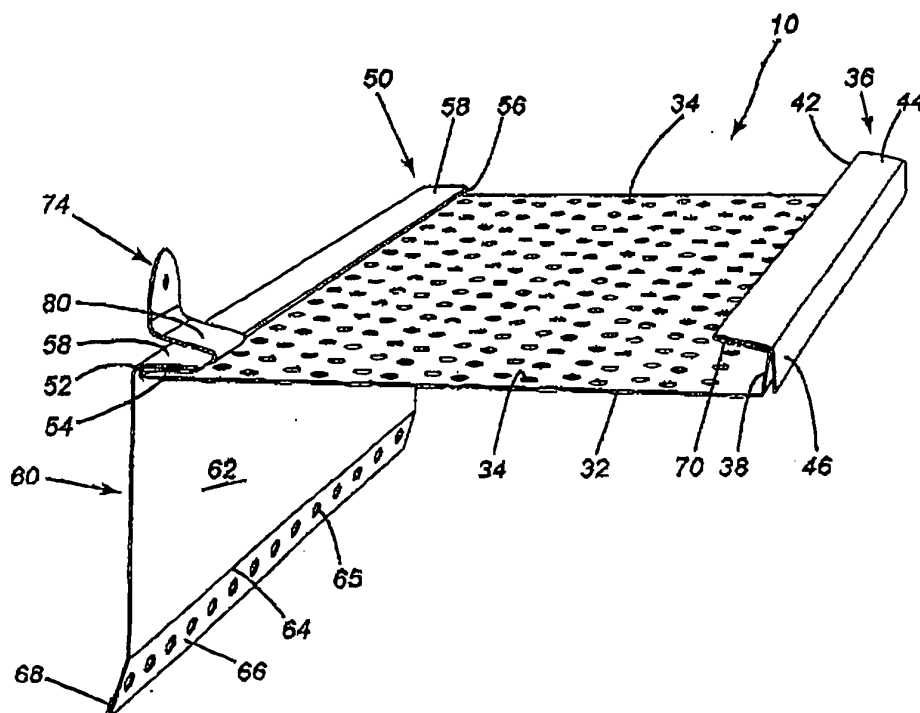
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(54) **Eavestrough cover with clip**

(57) An eavestrough cover (10) for use with an eavestrough (12), the eavestrough cover (10) having a central horizontal portion (32), a plurality of apertures (34) formed in the central horizontal portion (32), a first side (36) of the central horizontal portion (32) having a structure for engaging an eavestrough recess, and a downwardly extending wall (60) formed along the second side

(50) of the eavestrough cover (10), the arrangement being such that water from a drip edge of the house may enter the eavestrough (12). In preferred embodiments, clip members (74) are utilized for securing the eavestrough cover (10) (and eavestrough (12)) to the fascia of an adjacent structure on which the eavestrough (12) is mounted.

**FIG. 1**

Description

FIELD OF THE INVENTION

[0001] The present invention relates to eavestrough covers.

BACKGROUND OF THE INVENTION

[0002] The use of eavestrough covers is well known in the prior art and there have been many proposals for different types of shields. The purpose of the shield is essentially to permit passage of rainwater from the roof to the eavestrough while protecting the drain from extraneous foreign matter such as leaves and the like.

[0003] Different approaches have been taken to the design of eavestrough covers. Some of the proposed eavestrough covers are secured directly to the eavestrough while others are secured to the wall or roof of the adjacent structure.

SUMMARY OF THE INVENTION

[0004] It is an object of the present invention to provide an eavestrough cover which incorporates a clip member for securement and which permits drainage from a drip edge associated with the roof.

[0005] According to one aspect of the present invention there is provided an eavestrough cover for use with an eavestrough having an eavestrough recess defined by an eavestrough front wall, eavestrough top wall and a flange extending downwardly from said eavestrough top wall, the eavestrough cover comprising a central horizontal portion having first and second sides, a plurality of apertures formed in the central horizontal portion, the first side having a structure for engaging the eavestrough recess, and a downwardly extending wall formed along said second side of the eavestrough cover.

[0006] According to a further aspect of the present invention, there is provided in combination, an eavestrough and an eavestrough cover therefore, the eavestrough comprising an eavestrough rear wall, an eavestrough bottom wall, and an eavestrough front wall, an eavestrough top wall and a flange extending downwardly from the eavestrough top wall, an eavestrough recess being defined by the eavestrough top wall, the eavestrough front wall and the flange, the eavestrough cover comprising, a central horizontal portion having first and second sides, a plurality of apertures formed in the central horizontal portion, the first side being retained within the eavestrough recess, a downwardly extending wall formed along the second side of the eavestrough cover, and at least one clip member having a first wall for securement to an adjacent structure, and a second wall secured to the second horizontal portion.

[0007] The eavestrough of the present invention may be placed on the eavestrough such that a first side near the front wall of the eavestrough engages in a recess

formed therein. Adjacent the rear wall of the eavestrough, there is provided a downwardly extending wall from the eavestrough cover which preferably engages or rests on the bottom wall of the eavestrough. The arrangement is such that the drip edge may fit between the rear wall of the eavestrough and the downwardly extending wall of the eavestrough cover. A plurality of apertures are provided in the downwardly extending wall to permit water flow into the main eavestrough portion.

[0008] In the preferred embodiments, a clip member is utilized to secure the eavestrough cover to the adjacent fascia. The clip member may take different forms as will be discussed in the detailed description of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Having thus generally described the invention, reference will be made to the drawings illustrating an embodiment thereof, in which:

- Figure 1 is a perspective of an eavestrough cover according to one embodiment of the present invention;
- Figure 2 is a perspective view of a clip member associated with the eavestrough cover;
- Figure 3 is a side elevational view thereof with the eavestrough being shown in dashed dot lines;
- Figure 4 is a detailed side elevational view showing the engagement of the clip member with the eavestrough cover;
- Figure 5 is a perspective view of a further embodiment of a clip member;
- Figure 6 is a side elevational view showing the engagement of the clip member with the eavestrough cover; and
- Figure 7 is a cross sectional view illustrating engagement of the clip member with the eavestrough cover.

DETAILED DESCRIPTION OF THE INVENTION

[0010] Referring to the drawings in greater detail and by reference characters thereto, there is illustrated in Figures 1 to 4 a first version of an eavestrough cover and which cover is generally designated by reference numeral 10.

[0011] Eavestrough cover 10 is designed to be used with an eavestrough generally designated by reference numeral 12 and shown in dot dash lines. Eavestrough 12 has a rear wall 14, a bottom wall 16, and a front wall generally designated by reference numeral 18. Front wall 18 has three sections - a lower vertical section 20, an arcuate intermediate section 22, and an upper vertical section 24. At the upper end of upper vertical section 24, there is a top wall 26 and which top wall 26 terminates with an inwardly and downwardly extending flange 28. A recess 30 is thus defined by upper vertical section 24,

top wall 26 and flange 28.

[0012] Eavestrough cover 10 has a central foraminous horizontal portion 32 having apertures 34 formed therein. A first side 36 (adjacent the front of the eavestrough) has a structure comprising an inner substantially vertical wall section 38, a lower substantially horizontal wall section 40 which passes through bight 42 to an upper substantially horizontal wall section 44. The structure terminates in an outer vertical flange 46 which as may be seen in the drawings, is slightly spaced from inner vertical wall section 38 for reasons which will become apparent hereinafter.

[0013] A second side structure 50 is located proximate rear wall 14 of eavestrough 12 and is formed by the central foraminous portion 32 passing through bight 52 to a lower horizontal wall section 54. In turn, a bight 56 joins lower horizontal wall section 54 and an upper horizontal wall section 58 which then terminates in a rear vertical wall 60. Rear vertical wall 60 includes an upper section 62 which is separated from a lower section 66 by a bend line 64. Lower section 66 has an intumed flange 68 at the end thereof.

A plurality of apertures 65 are provided to permit water flow into the main portion of the eavestrough.

[0014] In the preferred embodiments, clips are used to retain the eavestrough cover 10 in place and one such clip is shown in the drawings. Clip 74 has a vertical section 76 with an aperture 78 therein and which is designed to receive a fastening device 86. Extending diagonally outwardly from vertical section 76 is a diagonal wall 80 which passes through a bight 82 to a lower horizontal wall 84. As may be seen, a recess 88 is formed between diagonal wall 80 and lower horizontal wall 84 so as to receive lower horizontal section 54 and upper horizontal section 58 of the second side structure.

[0015] As may be seen in Figure 2, first side 36 is placed within recess 30 of eavestrough 12 with outer vertical flange 46 abutting vertical wall section 24 to bias the eavestrough cover 10. As discussed above, second side 50 is retained in place by clip 74. Retaining member 95 is then used to secure clip 74 in position.

[0016] The structure is such that a drip edge can fit between rear vertical wall 60 of eavestrough cover 10 and rear wall 14 of eavestrough 12.

[0017] A second embodiment of the invention is illustrated in Figures 5 to 7. In this embodiment, similar reference numerals in the 100's are employed for similar components. Thus, there is an eavestrough generally designated by reference numeral 112 which has a rear wall 114, a bottom wall 116, and a front wall generally designated by reference numeral 118 as three sections - a lower vertical section 120, an arcuate intermediate section 122 and an upper vertical section 124. At the upper end of upper vertical section 124, there is a top wall 126 which terminates with an inwardly and downwardly extending flange 128 to thereby define a recess 130.

[0018] Eavestrough cover 110 has a first side 136 sub-

stantially identical to that described with respect to the first embodiment and thus will not be described in detail herein. However, it will be noted that second side 150 connects directly to rear vertical wall 160. In this embodiment, clip 174 has a vertical section 176 and a lower horizontal 190 with a plurality of fingers 192 extending diagonally downwardly. Fingers 192 are designed and arranged to fit within apertures 134 of central horizontal portion 132 to thereby retain the eavestrough cover 110 in position.

[0019] As was the case in the first embodiment, retaining member 180 is then used to attach the eavestrough and eavestrough cover to the adjacent facia.

[0020] It will be understood that the above described embodiments are for purposes of illustration only and that changes and modifications may be made thereto without departing from the spirit and scope of the invention.

Claims

1. An eavestrough cover for use with an eavestrough having an eavestrough recess defined by an eavestrough front wall, eavestrough top wall and a flange extending downwardly from said eavestrough top wall, the eavestrough cover comprising:

a central horizontal portion having first and second sides;
a plurality of apertures formed in said central horizontal portion;
said first side having a structure for engaging said eavestrough recess; and
a downwardly extending wall formed along said second side of said eavestrough cover.

2. The eavestrough cover of Claim 1 wherein said downwardly extending wall has a length sufficient to reach a bottom wall of said eavestrough or wherein said eavestrough cover is formed of an aluminium material.

3. The eavestrough cover of Claim 1 further including at least one clip member, said clip member having a first wall for securement to an adjacent structure, and a second wall designed to be secured to said central horizontal portion.

4. The eavestrough cover of Claim 2 further including a plurality of apertures formed in said downwardly extending wall or further including an aperture in said first wall of said clip member.

5. The eavestrough cover of Claim 3 wherein said central horizontal portion has, on said second side thereof, a folded portion to form a recess between said horizontal central portion and said folded portion.

6. The eavestrough cover of Claim 5 wherein said clip member engages within said recess or said clip member includes a diagonally extending wall between said first wall and said second wall.
7. The eavestrough cover of Claim 1 wherein said at least one clip member has a plurality of fingers extending downwardly from said second wall, said fingers being designed to engage within said apertures formed in said central horizontal portion.
8. In combination, an eavestrough and an eavestrough cover therefore, said eavestrough comprising an eavestrough rear wall, an eavestrough bottom wall, and an eavestrough front wall, an eavestrough top wall and a flange extending downwardly from said eavestrough top wall, an eavestrough recess being defined by said eavestrough top wall, said eavestrough front wall and said flange;
said eavestrough cover comprising
a central horizontal portion having first and second sides, a plurality of apertures formed in said central horizontal portion;
said first side being retained within said eavestrough recess;
a downwardly extending wall formed along said second side of said eavestrough cover; and
at least one clip member having a first wall for securement to an adjacent structure, and a second wall secured to said second horizontal portion.
9. The eavestrough and eavestrough cover of Claim 8 wherein said downwardly extending wall has a length sufficient to reach a bottom wall of said eavestrough or wherein said eavestrough cover is formed of an aluminium material.
10. The eavestrough and eavestrough cover of Claim 9 wherein said downwardly extending wall has a longitudinally extending bend line formed therein.
11. The eavestrough and eavestrough cover of Claim 9 further including a plurality of apertures formed in said downwardly extending wall or further including an aperture in said first wall of said clip member.
12. The eavestrough and eavestrough cover of Claim 8 wherein said central horizontal portion has, on said second side thereof, a folded portion to form a recess between said horizontal central portion and said folded portion.
13. The eavestrough and eavestrough cover of Claim 12 wherein said clip member engages within said recess.
14. The eavestrough and eavestrough cover of Claim 13 wherein said clip member includes a diagonally extending wall between said first wall and said second wall.
15. The eavestrough and eavestrough cover of Claim 9 wherein said at least one clip member has a plurality of fingers extending downwardly from said second wall, said fingers being designed to engage within said apertures formed in said central horizontal portion.

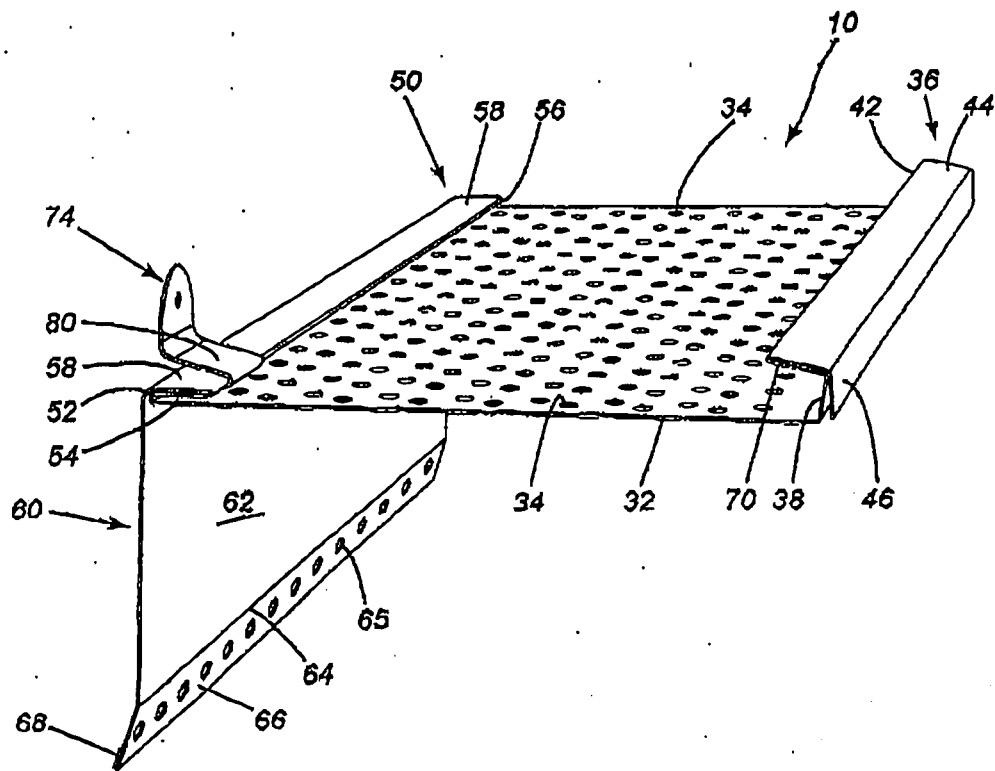


FIG. 1

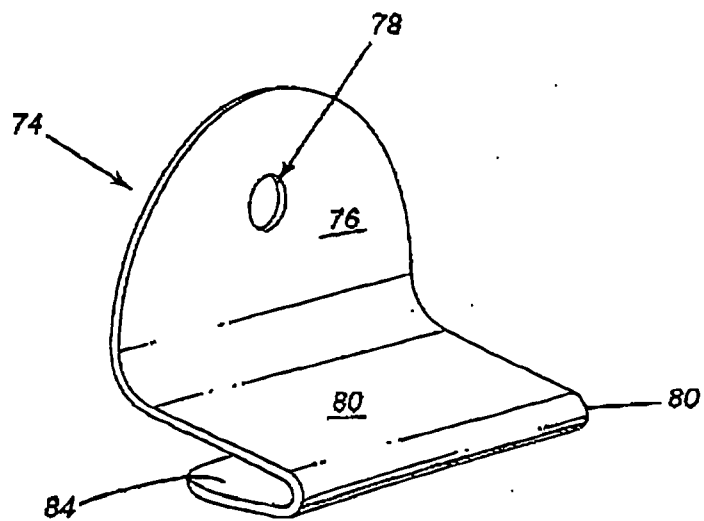


FIG. 2

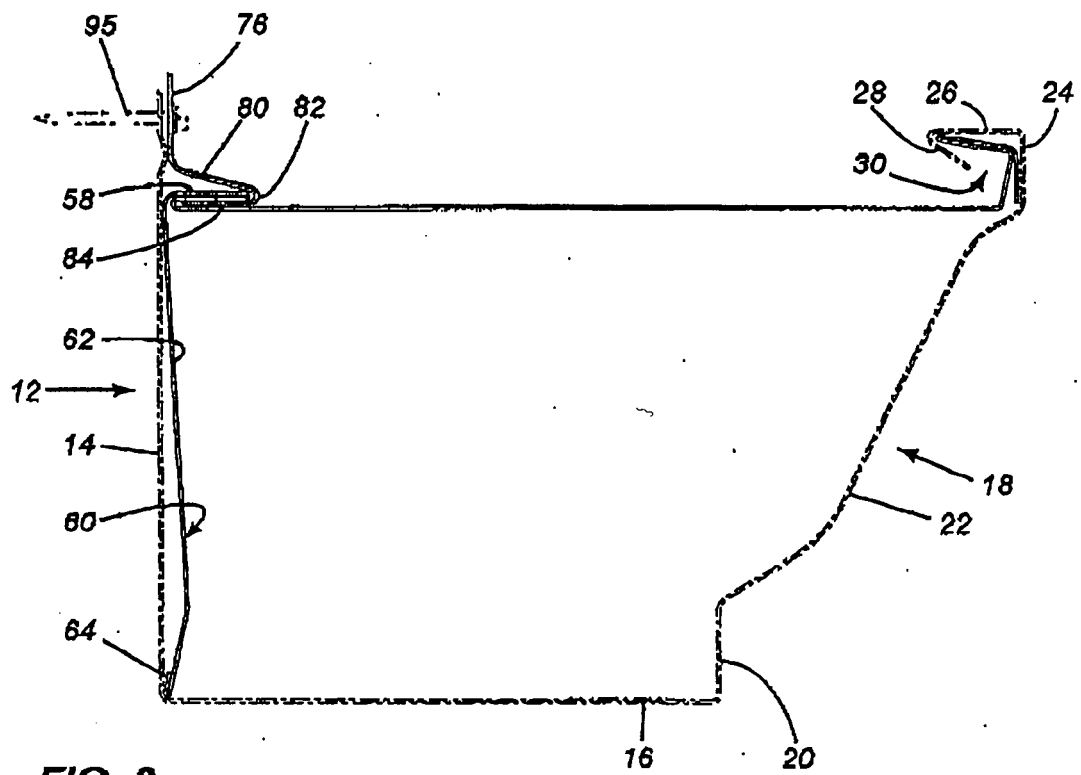
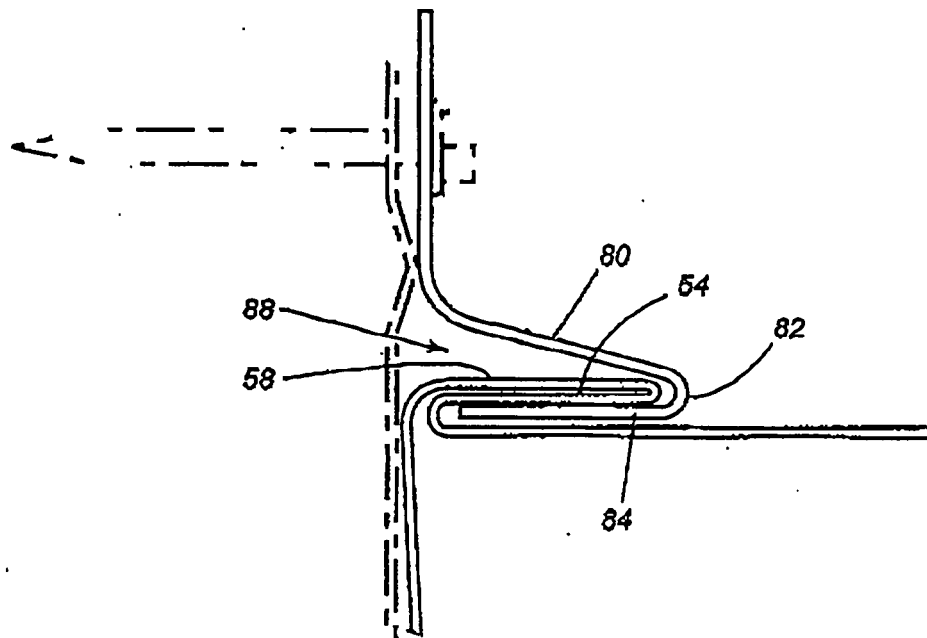


FIG. 3

**FIG. 4**

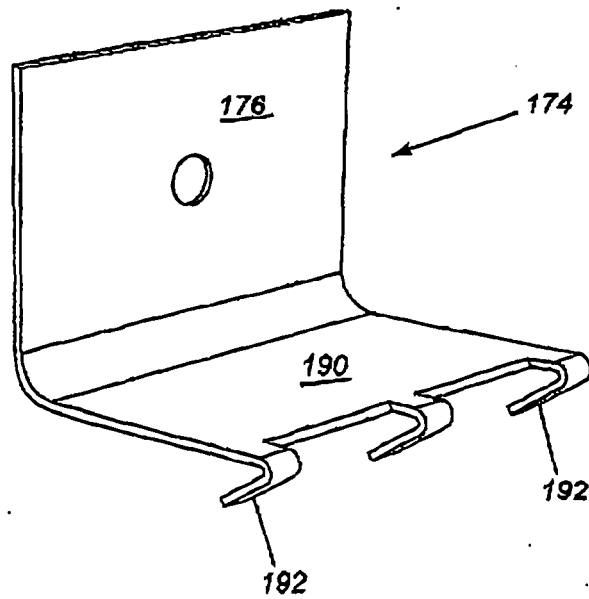


FIG. 5

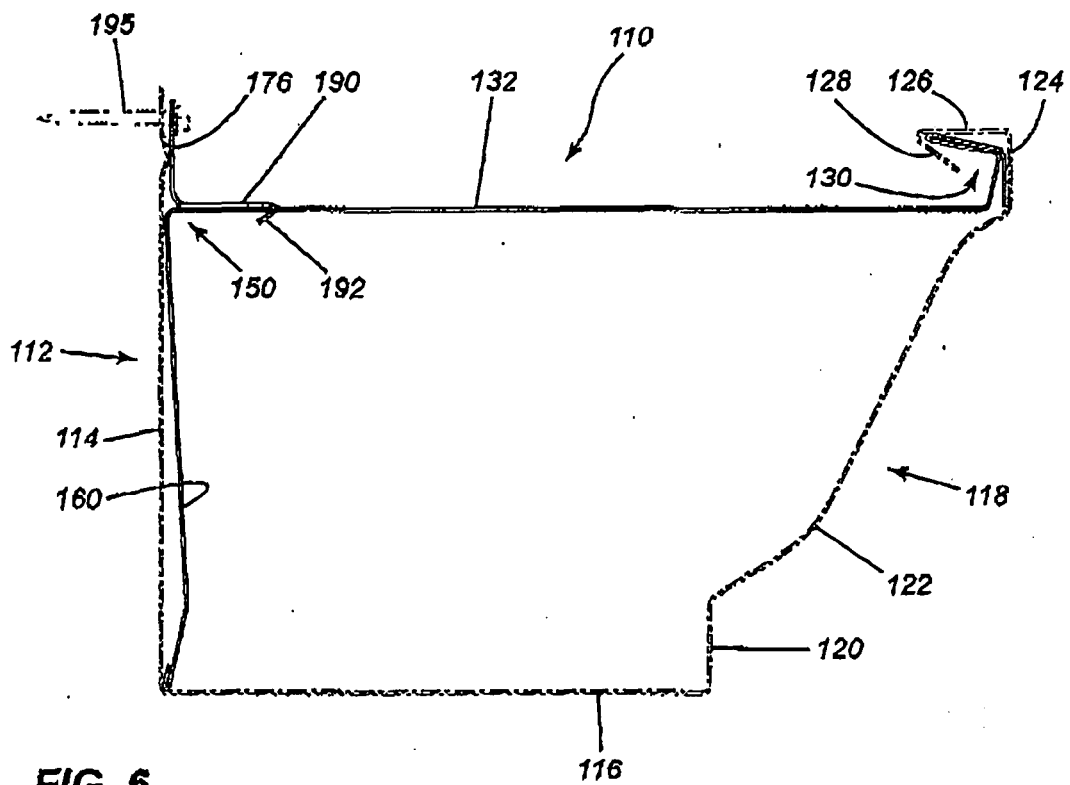


FIG. 6

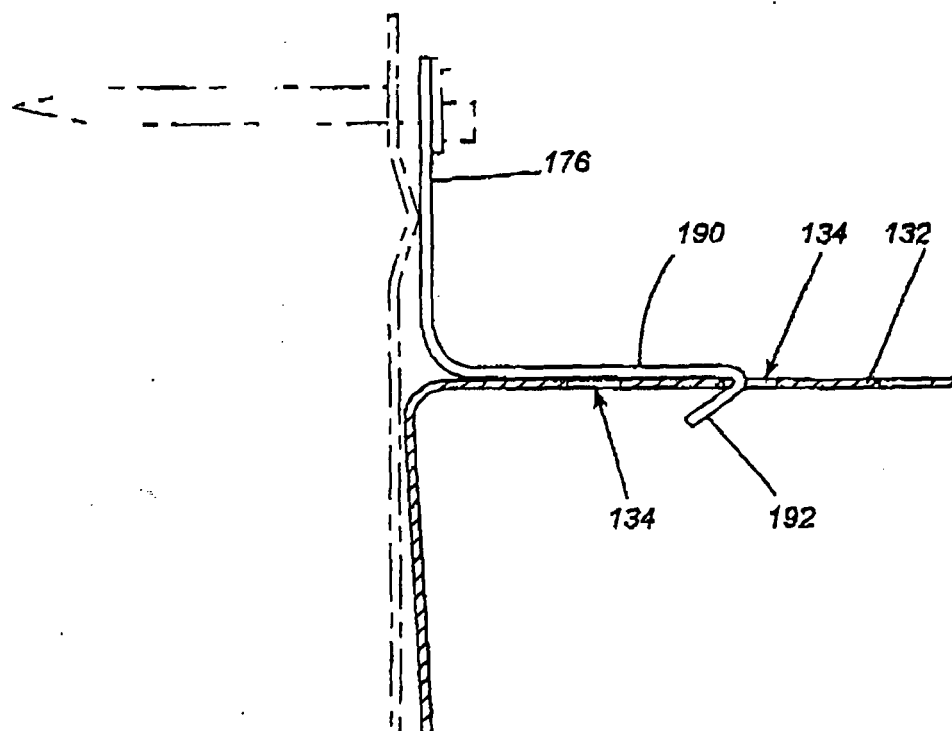


FIG. 7



EUROPEAN SEARCH REPORT

Application Number
EP 08 01 5094

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2007/169423 A1 (BROCHU GUY [CA]) 26 July 2007 (2007-07-26) * paragraph [0001] - paragraph [0002] * * paragraph [0011] * * paragraph [0023] - paragraph [0028]; claims 1,4,6; figures 1-3 *	1,2,4	INV. E04D13/076 E04D13/072
X	US 3 436 878 A (SINGER BEN L) 8 April 1969 (1969-04-08) * column 1, line 12 - line 19 * * column 2, line 38 - column 3, line 29 * * column 3, line 51 - line 57 * * column 3, line 60 - column 4, line 3; figures 1-3 *	1,2 3,5-15	
X	EP 1 460 199 A (BROCHU GUY [CA]) 22 September 2004 (2004-09-22) * paragraph [0001] - paragraph [0002] * * paragraph [0010] * * paragraph [0016] - paragraph [0024]; claim 1; figures 1-3 *	1,2 3,5-7	
X	CA 2 541 186 A1 (BROCHU GUY [CA]) 25 July 2007 (2007-07-25) * page 2, paragraph 2 * * page 3, paragraph 3 * * page 6 - page 8; claim 1; figures 1-5 *	1,2,4,8	E04D
X	DE 199 52 823 A1 (BWK DACHZUBEHOER GMBH [DE] LIMACO UNTERNEHMENSBERATUNG AG [LI]) 3 May 2001 (2001-05-03) * column 1, line 3 - line 5 * * column 3, line 53 - line 55 * * column 6, line 6 - line 14 * * column 8, line 12 - line 34; claim 1; figures 4,10 *	1,2,4 3,5-7	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 8 December 2008	Examiner Giannakou, Evangelia
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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EPO FORM 1503 03 82 (P04C01)



EUROPEAN SEARCH REPORT

Application Number
EP 08 01 5094

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2006/101722 A1 (EALER JAMES E SR [US]) 18 May 2006 (2006-05-18)	1,2,4	
Y	* paragraph [0001] * * paragraph [0060] - paragraph [0061]; figure 10 *	3,5-7	
Y	----- US 2007/012845 A1 (IANNELLI ANTHONY M [US]) 18 January 2007 (2007-01-18) * paragraph [0003] * * paragraph [0015] - paragraph [0019]; figures 1-4 *	3,5,6, 8-15	
Y	----- DE 39 05 961 A1 (PIEPER ROLF [DE]) 14 September 1989 (1989-09-14) * column 1, line 48 - line 59; figure 1 *	3	
Y	----- US 2 613 621 A (SCHRAEDER CHARLES H) 14 October 1952 (1952-10-14) * column 1, line 53 - column 2, line 12; figures 1,2 *	3	
A	----- US 2002/100223 A1 (BROCHU STEPHANE [CA]) 1 August 2002 (2002-08-01) * paragraph [0001] - paragraph [0002] * * paragraph [0010] * * paragraph [0019] - paragraph [0026]; claim 1; figures 1-4 *	3,5,6,8, 12-14	TECHNICAL FIELDS SEARCHED (IPC)
A	----- WO 98/46841 A (SERANCO INC [US]) 22 October 1998 (1998-10-22) * figure 1 *	2,9	
A	----- US 4 307 976 A (BUTLER ALAN W) 29 December 1981 (1981-12-29) * figures 1,4 *	7,15	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 8 December 2008	Examiner Giannakou, Evangelia
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 08 01 5094

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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08-12-2008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007169423 A1	26-07-2007	US 2008010906 A1	17-01-2008
US 3436878 A	08-04-1969	NONE	
EP 1460199 A	22-09-2004	AT 394556 T	15-05-2008
		CA 2457152 A1	20-09-2004
		US 2004182014 A1	23-09-2004
CA 2541186 A1	25-07-2007	NONE	
DE 19952823 A1	03-05-2001	NONE	
US 2006101722 A1	18-05-2006	NONE	
US 2007012845 A1	18-01-2007	NONE	
DE 3905961 A1	14-09-1989	NONE	
US 2613621 A	14-10-1952	NONE	
US 2002100223 A1	01-08-2002	CA 2332485 A1	26-07-2002
WO 9846841 A	22-10-1998	AT 259455 T	15-02-2004
		AU 6958098 A	11-11-1998
		CA 2286654 A1	22-10-1998
		DE 69821612 D1	18-03-2004
		DE 69821612 T2	23-12-2004
		DK 983410 T3	03-05-2004
		EP 0983410 A1	08-03-2000
		PL 336098 A1	05-06-2000
		US 6493993 B1	17-12-2002
		US 5911659 A	15-06-1999
US 4307976 A	29-12-1981	NONE	