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(A)

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WO 2002/55809

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(30) 0100100-7 2001 01 12 (SE)

0100101-5 2001 01 12 (SE)

(71) 1( :260 40)

(72) , -26040 1

(74)

:

(54)

가

가 .

14

가 .

(FLOATING FLOOR)),

(parquet floors)

(

(wood fibre)

가 , ,

가 , ,

(PARTICLE BOARD)

가

WO 9426999

Alloc

가

가

가

(tongue)

26999 WO 9747834

가

, WO 94

15-mm

15mm

가

3mm

9%

가

18mm

200mm

가

가

(running

meter)

가

가

가

가

(starting format)

가

가

가

가

가

가

가

가

가

가

가

가

(HP)

(VP)

WO 9627721, DE - A - 3041781

JP 3169967

6151

가

1a

, WO 9426999

10b

WO 996

3a      3b      WO 9426999      (1)      (1)      (2),      (3)  
),      (4a, 4b) 가      (5a, 5b) 가

(4a, 4b)      (5a, 5b)      1c      D2      (HP)(  
2c      )      ,      가      (VP)( 2c      )      ,      (HP)(

WO 9426999(      1a      3b)      ,      (1)      (4a)  
가      ,      (6)      가      (6)      (6)

(4a)      (VP)      .      (6)

WO 9426999      WO 9966151  
(6)      (1)      가      (1)      가

WO 9426999      WO 9966151      (6)      30mm  
0.5mm

(6')      (1)      (5a)      (VP)  
(6)      (6)      0.5mm      가      (8)      (8)      (10)

(1')      (6')      (4b)      가      (3)      (10)      가      (14)      (10)

가      (VP)      (8')      가      ,      (14, 14')      (5b)      (14')      (10)

(10')

( 1c D1 )      (1)  
(4a)      (5a)      (lip)      (6, 6')  
16)      .      (4a, 5a)      (16)      (20)  
(4b, 5b)      ,      (18)가      ( 2a      ).

1a      1c      (U)      (1, 1')      (HP)      (VP)  
가      (C)      가      (downward angling)      ,

2a      2c      (1, 1')      (5a, 5b)      (snap action)      가  
(4a, 4b)      (4a, 4b)      ,      1      (5a, 5b)

(1')      (1)      1a      1c      (4a, 4b)  
(1')      (4b)      1a      (1)      (4a)      가      ,  
(20)      (16)      .      (1')      1b      (가  
)      (20)      ,      (16)      가  
(6)      (8)      (14)      (8)      (9)

(1)

1c      ,      (1, 1')      (4a, 4b)      D1      D2  
,      (1, 1')      ( ,      D3)

2a      2c      (1, 1')      (5a, 5b)가      (1)

(1') D1 D2 가  
 (1') 1a 1c (20)  
 (1) 2a 1 (16)  
 (6') (5a, 5b) (8')가 (14') (8')  
 (6') (10, 10') (14')  
 (14') 1a 1c 2a 2c (1) (1') (D3) 가  
 (1) (1, 1') 가  
 (10) (14) (10') (minor play) (HP)) 가  
 가 (10, 10') 0.01-0.05mm (HP) (14, 1)  
 4') (VP) (8) WO 9426999 (HP)  
 , 3 :  
 \* (snapping in)  
 \*  
 \*  
 가 가 3 , 3 , 1 2 , 1 2  
 , 3 , 2 1 1 3 3 가 , 1 2  
 , 1 1 3 3 가  
 (6) 7mm 가 4a 4b 0.6mm 가  
 WO 9966151 가  
 가 가  
 가 GB-A-1430429 7a 7b  
 가 (tongue-and groove joint) 가  
 , WO 9627721( 5a 5b  
 ) JP 3169967( 가 7a 7b

가 가 (manufacturing tolerance)

DE - A - 1212275

8a 8b

가

가

FR - A - 2675174

가

(bead)

(

separate spring clips)

10a

10b

DE 20013380

가

, DE 19925248

가

가

가

가

가

가

가

가

가

가

1

2

가

1

2

가

0.2 0.1mm



가 . '

가 .

\_\_\_\_\_

, , , 가  
, 가 .

\_\_\_\_\_ 가

가 , , , .

\_\_\_\_\_

가 , , , , 가 , 가  
1 .

, , , , a) b) , , , 2 .

가 , , , , 3

, 가 , 4

3 1 (D3) , 가 1 4 (D1), 2 (D2) 2  
가 가

가 , 가 4 가 가

가 , 가 , (outer and upper part) 가 ,  
가 가 . (D2)  
가 (D1)

가 , , , , 가 가

, , 가 가 , 가 .

2 , 가 가 ,

가 , 가

3 , 가 가

가

- -

가 .

2c

가 . 1a

1a 1c WO 9426999 3

2a 2c WO 9426999 3

3a 3b WO 9426999

4a 4b WO 9966151

5a 5b GB - A - 1430423

6a 6b WO 9627721

7a 7b JP 3169967

8a 8b DE - A - 1212275

9a 9b WO 9747834

10a 10b FR - A - 2675174

11a 11b 1

12a 12c

13a 13c

14

15

16a 16c

17a 17c

가

18

19

20a 20b

21 가 가

22a 22e

23a 23e

(1, 1') 1

11a 11b

11a 11b (1) (4a) (1') (4b)

(VP) (D2) (VP) (D3) (HP) (D1) (4a, 4b) (VP) (1')

(VP) (VP) (HP) (VP) (38) 가 (4a) (36) (4b)

(30) 가 (1) (1) (32) 가 (34) 가

15mm , 2.4m 0.2m 가

(30) 가 (lamella type) 가 (32) 3-4mm (34) 2mm (hardwood)

(36) (4b) (38) (4a) (36) (39) (40) (39, 40) 가

(36) , 11b (HP) (41) .  
 (HP) , (A) 가 (HP) (43) . (43) (40) ,  
 (35) (46)가 (43) 가 (40) ,  
 (48) 가 . (50) . (VP)  
 (52) 가 .

11b (4a) (VP) (VP) (4b)가 (38)  
 (root) (VP) 가 (8) (8) (65) (4b) (61) 가 .  
 (64) 가 . (65) (8) (67) (65) (66) ( )  
 67) 가 가 (68) (8) (67) 가 (69) (69) (69)  
 가 가 (71) , (70) (71)  
 (50) (HP) (41, 61) (VP) ,  
 (72) 가 .

(43, 64) (50, 71) (HP) (D1)  
 (D1) , (HP) (D2) (45, 65)  
 21a 21b , (45, 65) (43, 64) (45, 65)

(38) (VP) (69) (8) 가  
 (65) 가 (VP) , (36) (HP) (45)  
 11b (38) (51) (VP) (52) 가 .  
 (52) (8) (45) (65) (57) (66)  
 가 . (68) 11a 11b (69) (66) (43, 51)  
 (A) 가 가 가 .

(71) (HP) (69) (70)  
 ) 가 .

(40) (38) (71) (50) 가 .  
 (50, 71) (39) (48) (43) (64) .  
 (HP) (D1) .  
 (HP) (VP) , (48) (38)  
 (69) , 가 .

(C)( (HP) (VP)  
 (LP2) (30) (36) (40) (45, 65) (LP1) (C)  
 (HP) (HP) 가 가  
 (40) (39)

, (65) (A) .  
가 .  
가 .

12a 12c (40) . 12b ,

13a 13c 12a 12c . (39), (40) (38)

, 14 15

, , 가 (8) 가 가 . (40)  
(45, 65)

14 15 (40)  
가 ,

가

46-67, 48-69, 50-70 52-72 .

(32) (30) (34) 가 가 , 가 가 (39) (40) (30)

16a 16c . , 가 /

(30a, 30b, 30c)

가 , (38) (36) 가 (3) .  
6) 가 (30b) , 가 가 (30c) 가 가

가

가

가  
가

,가

가

가

가

17a

17c

(39) 가

(8) 가

가

(40)

(39)

(40)

(40)

(40)

가

17a

가

가

(38)

(36)

(B1)

(40)

가

(38)

(40)

(38)

(49)

(8)가  
(40)

(35)

(50)

(40)

(49)

(40)

(50)

(49b)

(40)

가

17b

(B2)

(38)

(40)

(49)

(S4)

(36)

(38)

가

가

가

가

가

(with one board)

18

(40)

(B3)

가

(66)가

가

(44)

(35)

19

20a

20b

1 (1)

(2a, 2b)

가

가

(91, 92)

(2a)

(2b)

1 (1)

(2a, 2b)

(1)

C3-C4

20b

(38)

(36)

(40)

(36)

(2b)

(8)

(93, 94)

20a

가

C3-C4

(38)

(40)

가

가

(42, 68)

(8)

(39)

(40)

20b

(91)

(2a)

19

(92)

(2b)

가

4

가

(36)가

21

(PB)

(63)

(VP)

(T)

22a (19) 22e 23a 가 23e (2a, 2b) (91, 92)가 (19) (93, 94)

22a (93, 94) 23a (91, 92) (38) (91, 92) (40) 가

22b (2b) 23b (2b) 가 23c (93, 94) (38) (91, 92) (38) (40) (93, 94) (38)

d 22c 23d (91, 92) 22e 23e (38) (40) (40) 22 23d 가

(38) 가 (38) 가 (40) 가

가 가 가

(57)

1. (VP) (34) (48) 가 (4a, 4b)가 (36) (4a)가 (4b)가 (30), (2), (39, 40) (8)

가 (38) (VP) (36)가 (35) (45) (36)

가 (40) (30) (36) (45) (VP)

(38) (2) (65) 가 (HP) (36) (45) (VP)

(35) (39) (45) (65) (38) (8) (VP) (D2)

(40) (HP) (D1) (71) (50) 가 (30)

(40) (HP) (45, 65) (VP) (LP1) (HP) (C) (30)

(LP2) (30) (40) (39) (VP)

- (40) 가 ,  
 (4a, 4b) (HP) (40) (
- pushing together)
2.  
 1 , (39) (40)
  3.  
 1 2 , (38) 가
  4.  
 1 , 2 3 , (4a, 4b)  
 (38) (40)
  5.  
 1 4 , (4a, 4b)  
 (38) 가 (C) (36) (HP) (VP)
  6.  
 5 , (4a, 4b)  
 (38) 가 (C) (36) (HP) (V
  7.  
 , (69) (VP) (48) (HP)
  8.  
 , (50) (48)
  9.  
 (39) , (38) (38) (40) (50, 71)  
 (38) (45, 65) (HP)
  10.  
 , (45, 65) (HP)  
 , (VP) (C) (48) 가 가 (45, 65) (HP)
  11.  
 1 9 , (45, 65) (HP)  
 (HP) (VP) 가 (48) 가 가 (45, 65)
  - 12.



- 24 **25.** (38) (36) (HP) (HP) (VP) 가  
(40) (4a, 4b)
- 26.** (LP2) (LP1) (T) 10% (40)
- 27.** (HP) (45, 65) 90° 20°
- 27 **28.** (45, 65) 30° (HP)
- 29.** (50, 71) (48) 가 가  
(VP) (C) 가 (HP)
- 29 **30.** (38) (40) (50, 71) (48) 가 가 가  
(HP) (HP) (VP)
- 31.** (45, 65) (50, 71) (HP)
- 31 **32.** (50, 71) (45, 65) (HP)
- 29 **33.** 32 (50, 71) (45, 65)  
(HP) 20°
- 33 **34.** (50, 71) (45, 65) (HP) 20°
- 35.** (45, 65)
- 36.**

- 35 , (38) (VP) , (38) 가 (68) 가 ,  
(HP)
37. , (39) 가  
(HP)
- 가 (42) 가 .
38. (45, 65) (50, 71)  
(VP)
39. , (65) (69) , (T) 0.1
40. , (45, 65) (VP)  
(35)
41. 10% 가 , (45, 65) (T)
42. (T) 0.3 , (38) (VP) ,
43. 가 (4a) , (4b) / (HP) (63)
44. 가 , (36)
45. 44 , (HP) (42) 가
46. , , 가 .
47. , (38) , 가 가
48. 47 , (38) 가
49. ,

50. , (39) (40) .
51. , (35) (39) (50)  
(40) .
52. , (50, 71) (T) 15%
53. (39) (40) , (VP) (50) ,  
(T) 30%
54. 2% , (36) (VP) , (38)
55. , (38) (39) (40) 가
56. , (39) (40) 가
57. , 2 , 2 ,  
(38) (4b) (VP)
- (36) (4a)  
(2) (14) (6) 가 , (6)
58. 57 , (6) .
59. , (30) 가
60. 59 , (30) 가
61. (30), (2), (34) (4a, 4b) 가 , (4a)가  
(39, 40) (8) 가 (38) (48) 가 (36) , (4b)가  
가 (VP) , (36)가 , (35) (45) (36)

(40) (30) , (36)

(38) , (HP)

(45) (VP) (65) 가 ,

(35) (39) (45) (65) (VP) (D2)

(38) (8)

(40) (HP) (D1) (71) (50) 가 ,

(40) (HP) (VP) (C) (30)

(45, 65) (LP1) (HP) ,

(LP2) (30) (40) (39) (VP)

(40) 가 ,

(HP) (40) (pushin

g together)

**62.**

61 , (39) (40)

**63.**

61 62 , (38) 가

**64.**

61 , 62 63 , (4a, 4b)

(38) (40)

**65.**

61 64 , (4a, 4b)

(38) 가 (C) (36) (HP) (VP)

**66.**

65 , (4a, 4b)

(VP) (38) 가 (C) (36) (HP)

**67.**

61 (HP) 66 , (69) (VP) (48)

**68.**

61 67 , (50) (48)

- )
- 69.**  
 61 68 , (50, 71)  
 , (45, 65) (HP)
- 70.**  
 61 69 , (45, 65) (H  
 P) (HP) (VP) 가 가  
 가 (48) 가 가  
 가 (45, 65)
- 71.**  
 61 69 , (45, 65) (HP)  
 (HP) (VP) 가 가  
 가 (48) 가 가  
 가 (45, 65)
- 72.**  
 61 71 , (39) (38)  
 (43, 64) 가 (VP) (45, 65)
- 73.**  
 72 , (43, 64) (45, 65)  
 (VP)
- 74.**  
 72 , (43, 64) (HP)
- 75.**  
 72 , 73 74 , (43, 64)
- 76.**  
 61 75 , (36) (38) (69)가  
 (39) (38) (45, 65)  
 (50, 71) (36)
- 77.**  
 76 , (69) (36)  
 (45, 65)
- 78.**  
 61 79 , (38) (36) (4a, 4b)  
 30%
- 79.**  
 61 78 , (50, 71) (  
 HP) 10 °
- 80.**  
 79 , (50, 71) (HP) 30 °

81. 80 , (50, 71) (HP) 20 °
82. 61 81 , (45, 65) (50, 71) (VP)
83. 61 82 , (36) (38) (VP) (D3) 가
84. 61 83 가 , (38) (4a, 4b) (36) (HP) (VP) (C)
85. 84 , (38) (36) (HP) (HP) (VP) 가 (40) (4a, 4b)
86. 61 85 , (LP2) (30) (LP1) (T) 10%
87. 61 86 , (45, 65) 90 ° 20 ° (HP)
88. 87 , (45, 65) 30 ° (HP)
89. 61 88 , (50, 71) (48) 가 가 (HP) (VP) (C) (50, 71) 가
90. 89 , (50, 71) (50, 71) (HP) (48) 가 가 (HP) (VP) 가
91. 61 90 , (45, 65) (50, 71) , (HP)
- 92.

- 91 , , (50, 71) , (45, 65) (HP) ,
- 93.**
- 89 (HP) 92 20 ° , (50, 71) (45, 65)
- 94.**
- 93 , (50, 71) (45, 65) (HP) 20 °
- 95.**
- 61 94 , (45, 65)
- 96.**
- 95 , (38) (VP) , (65) (HP) 가 (68) 가 ,
- 97.**
- 61 96 가 , (39) (45) (HP) 가 (42) 가 (45)
- 98.**
- 61 97 , (45, 65) (50, 71) (VP)
- 99.**
- 61 (T) 0.1 98 , (65) (69) ,
- 100.**
- 61 (HP) 99 , (35) (45, 65) (VP)
- 101.**
- 61 (T) 100 10% 가 , (45, 65)
- 102.**
- 61 , 101 (T) 0.3 , (38) (VP)
- 103.**
- 61 (63) 가 102 (4a) , (4b) / (HP)
- 104.**
- 61 103 가 , (36)
- 105.**

104	,	(39)	(HP)	(42)
가		.		
<b>106.</b>				
61	105	,	,	(69) 가
.				
<b>107.</b>				
61	106	,	(38) ,	가
가		.		
<b>108.</b>				
107	,	(38)		가
.				
<b>109.</b>				
61	108	,		
.				
<b>110.</b>				
61	109	,	(39)	(40)
.				
<b>111.</b>				
61	110	,	(35)	(39)
(50)	(40)	.		
<b>112.</b>				
61	111	,	(50, 71)	(T) 15
%		.		
<b>113.</b>				
61	112	,	(VP)	
,	(39)	(40)		(T) 30%
.				
<b>114.</b>				
61	113	,	(36)	(VP)
,	(38)	2%		
.				
<b>115.</b>				
61	114	,	(38)	(39)
가		.		(40)
<b>116.</b>				
61	115	,	(39)	(40)
.				가
<b>117.</b>				
61	116	,	2	,
,				2
(38)				(VP)
,				
(36)				
			(8) 가 ,	

(2)

(14)

(6)

118.

117 , (6)

119.

61 118 , (30) 가

120.

119 , (30) 가

121.

61 120 , (4a, 4b, 5a, 5b) 4

122.

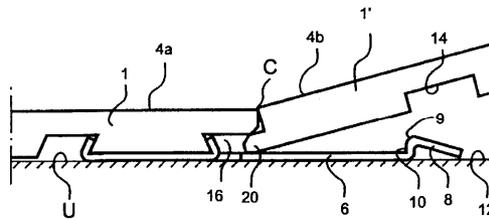
121 , 4 가

123.

121 122 , (38) 가 (4b) 가  
 / (4b) / (36) 가 가 (4a) (4a) 가

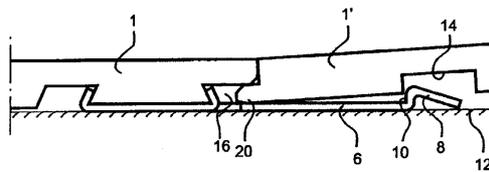
1a

(종래 기술)



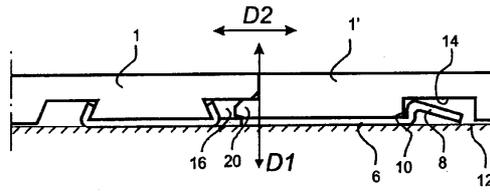
1b

(종래 기술)



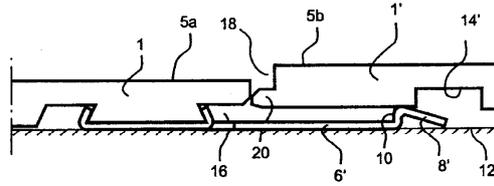
1c

(종래 기술)



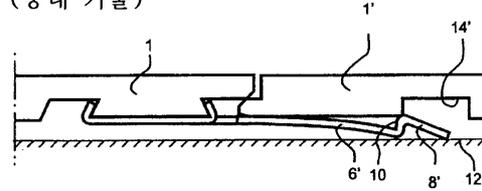
2a

(종래 기술)



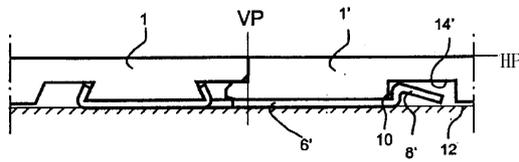
2b

(종래 기술)



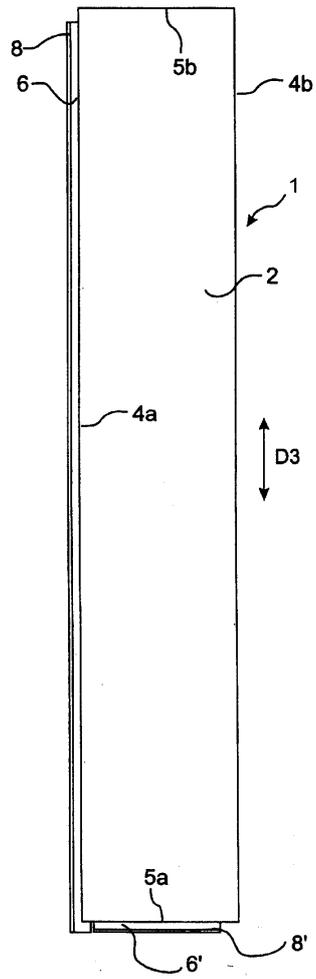
2c

(종래 기술)



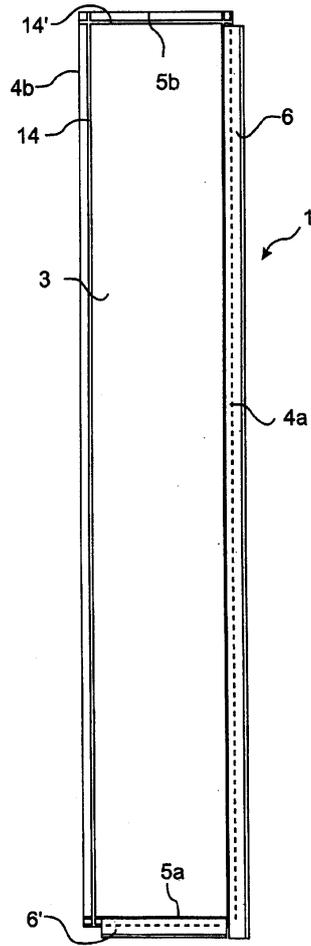
3a

(종래 기술)



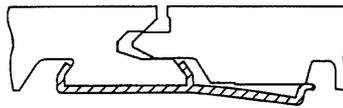
3b

(종래 기술)



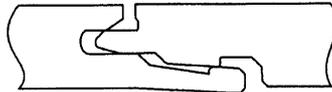
4a

(종래 기술)



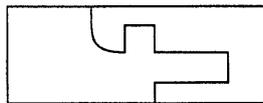
4b

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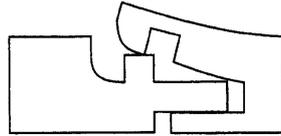


5a

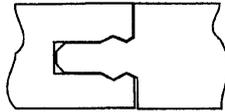
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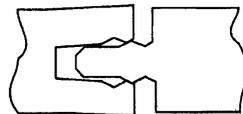
5b  
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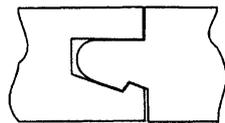
6a  
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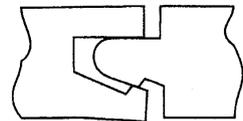
6b  
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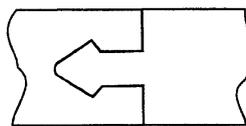
7a  
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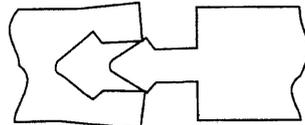
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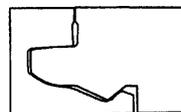
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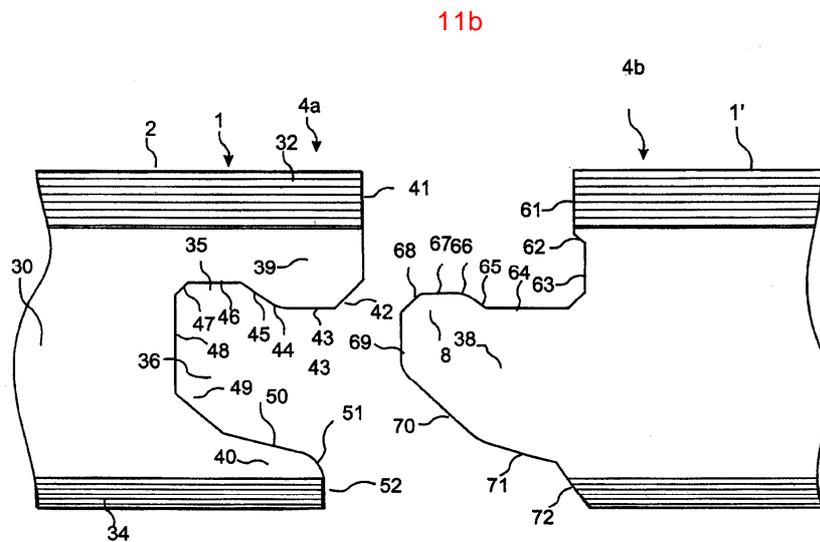
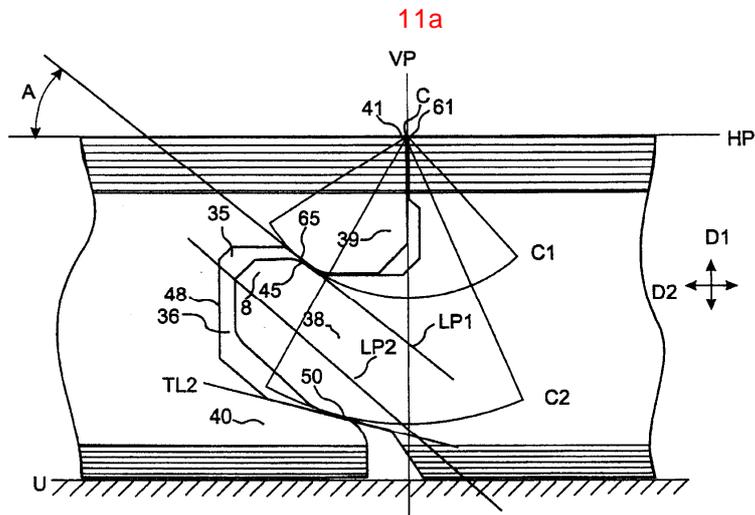
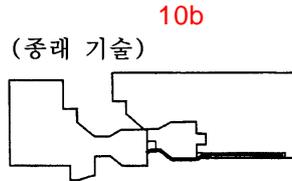
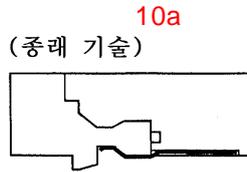
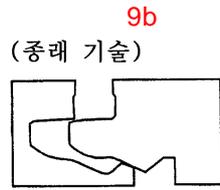


8b  
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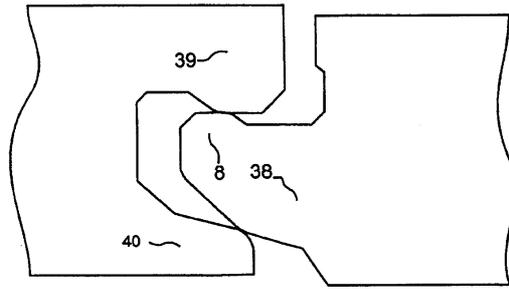


9a  
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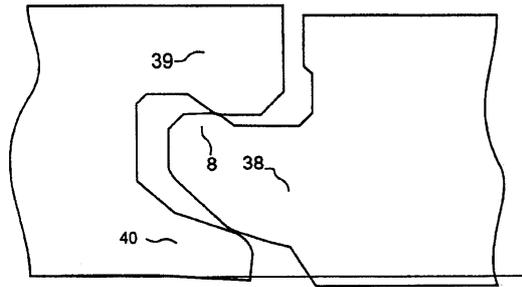




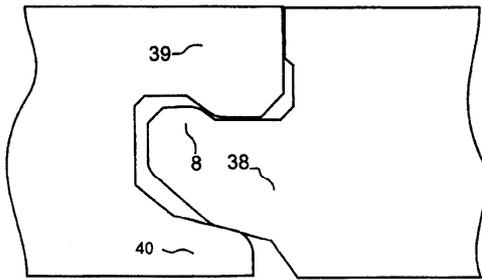
12a



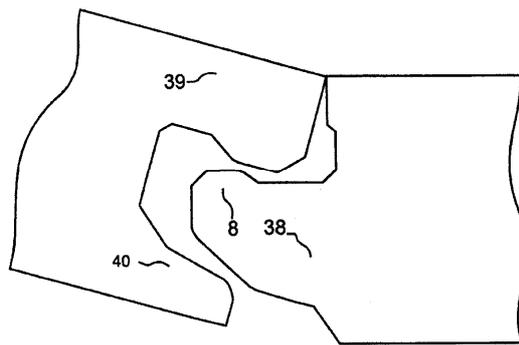
12b



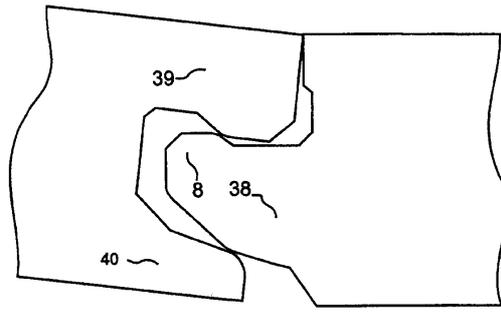
12c



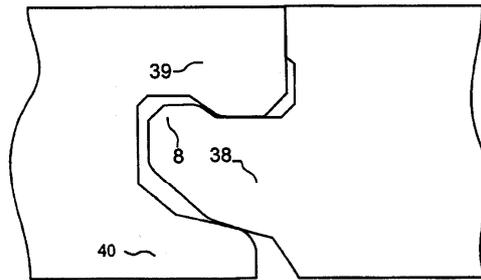
13a



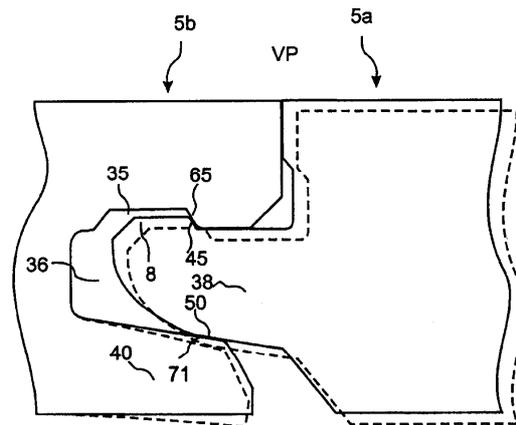
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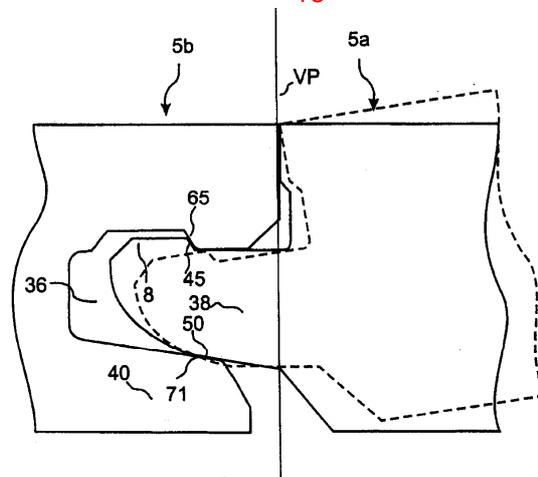
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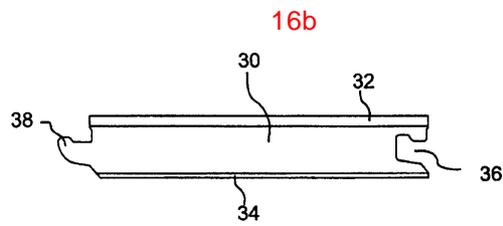
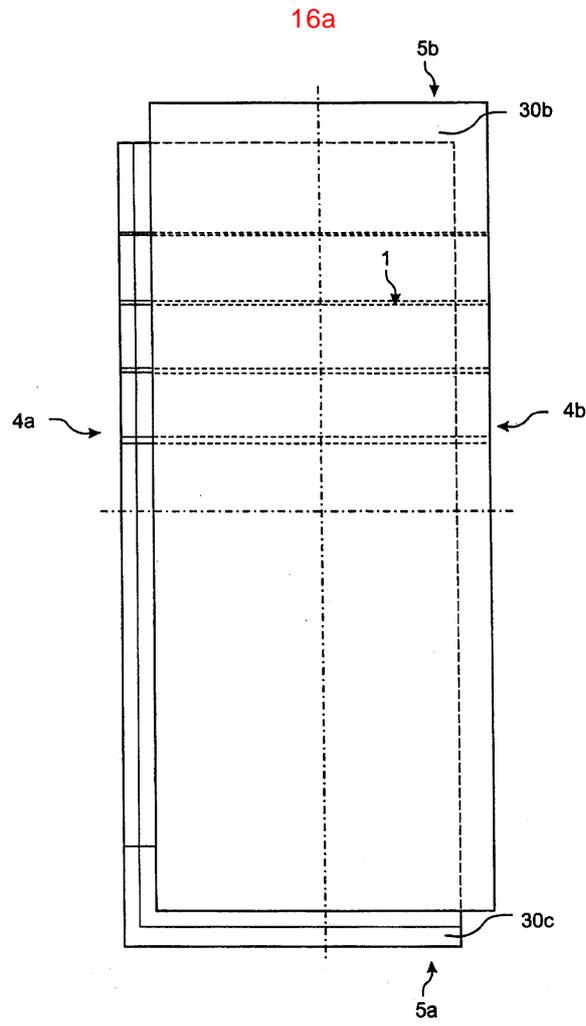


14

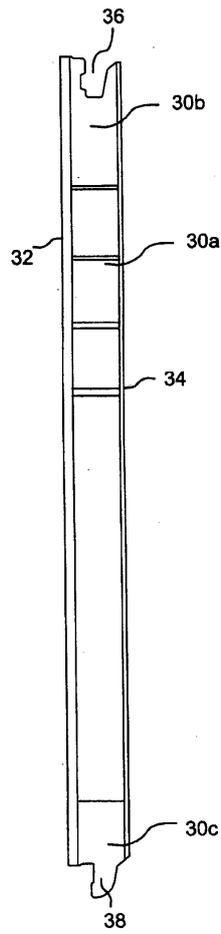


15

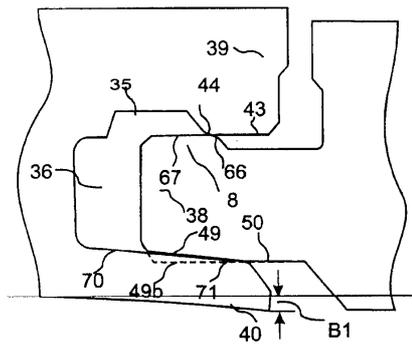




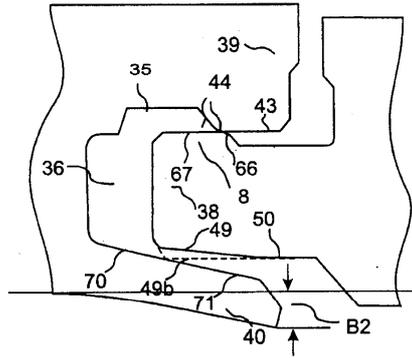
16c



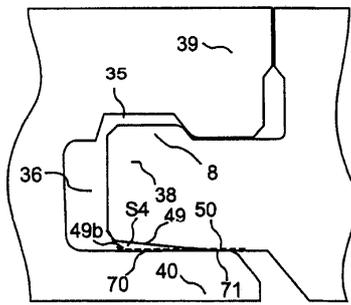
17a



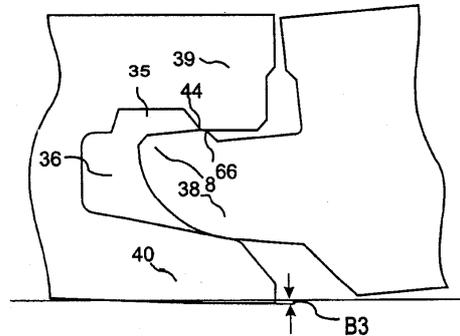
17b



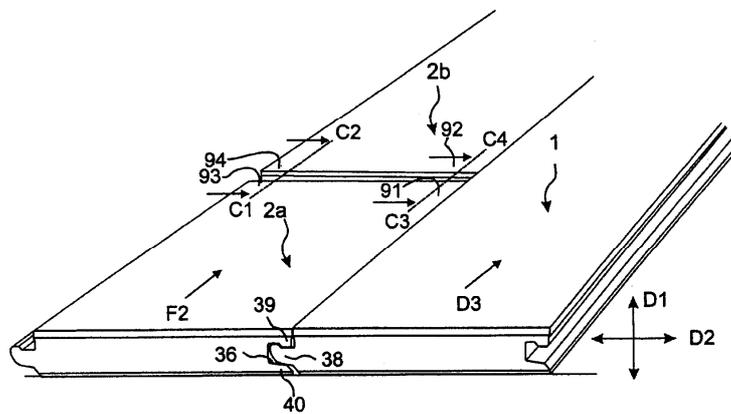
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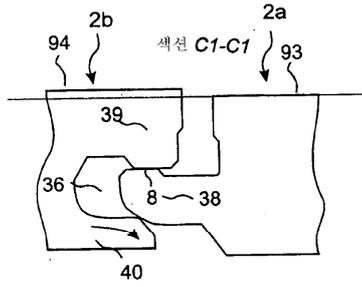
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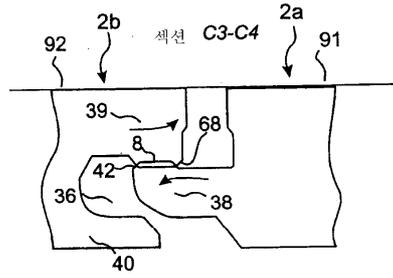
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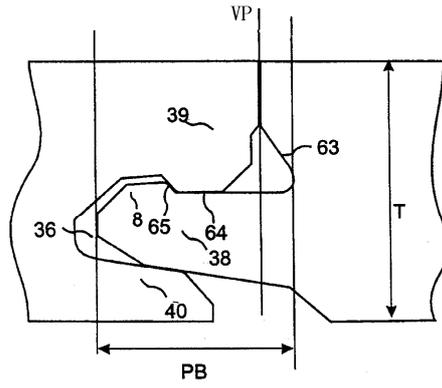
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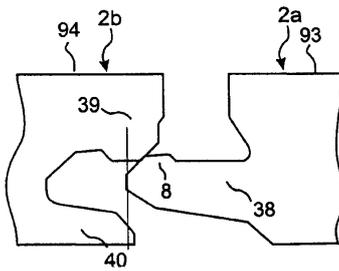
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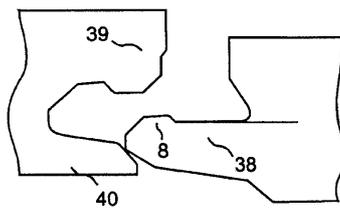
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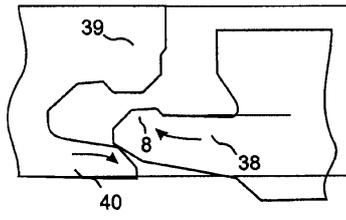
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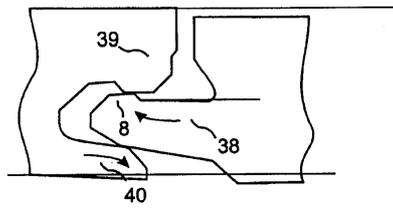
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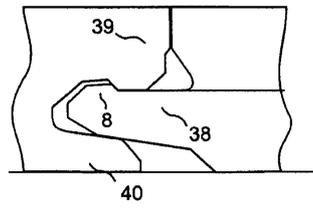
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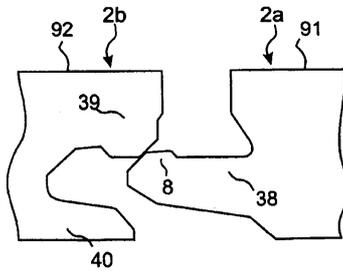
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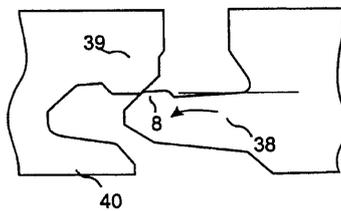
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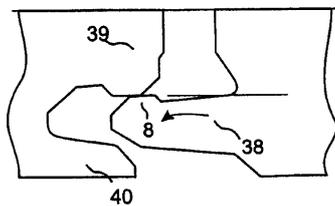
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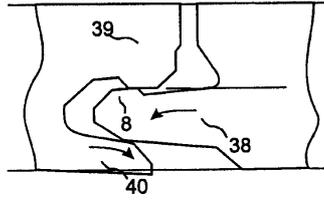
23b



23c



23d



23e

