

(19)  
(12)

(KR)  
(A)

(51) . Int. Cl.<sup>7</sup>  
G02B 6/46

(11)  
(43)

10-2004-0023737  
2004 03 18

(21)	10-2004-7001973		
(22)	2004 02 09		
	2004 02 09		
(86)	PCT/US2002/022383	(87)	WO 2003/014793
(86)	2002 07 11	(87)	2003 02 20

(30)	09/927,663	2001 08 10	(US)
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(71)	55133-3427	.	33427
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(72)	,	,	33427
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(74)

:(54)

1		(200)	3	가
2		(210)	,	
		(220)		3

2

, 3 , , ,

3 , 3

가

가 (optical shuffle)' 8 8 1 1 8  
8 , 2 , 2 , 1 , ,  
(Cm) (Fn) Cm Cm' , ,  
가 64 , ,  
가

가

Flex Foil Ⓡ 5,204,925  
(pressure sensitive adhe  
sive; PSA) , ,  
Mylar Ⓡ Kapton Ⓡ (Bonanni) , ,  
90° , ,  
가 , ,  
가 , ,  
가 (Knasel) 6,005,991  
(PCB) , ,  
Mylor Ⓡ , ,  
1  
(multifiber connector)  
2



가

가

가

1 8 x 8

2

3

4 3

5 4

6 3

7

8 4 7

9 7

10 7

11 7

12

13 12

14

15  
14

16 가 , 3

17 , 3

18 (ferrule spring, push-pin connector)

3

19

18

3

20

3

2

6

3

가

1

2

가

1

1

8

2

2

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8

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8

2

1

가

2

2

1

8

1

2

8 x 8

,

,

2

64

8

8

, CAD

8,

12, 16

24

가

UV

4

8

1

1

8

2

1

8

1

1

8

2

1

8

N-1

1

11

2

1

8

1

1

2

2

,

1

가

1

2

가

2

,

, N+2, N-2 )

CAD

가

()

가

CAD

3

3

('FFF'),  
(SLA') 가  
(tracing)

(rasteriz

ing)

3

3

2

1

3

가 ('UV')

가

가

가

3

3

가

2  
(210)8 x 8  
(220)  
8 x 8  
가

(200)

가  
(230)

(230)

1 8  
1 8  
8

CAD

1 1 8  
2

3

(300)

(310)

(300)  
(320)  
(300)

가

, 1 8

4

3

(450)

가

(400)가

(400)

(410)

(400)  
(450)  
(ruggedized)'

Kevlar ®

가

5

(100)

(500)

(400)

(410)

6

가

(610, 620)

(600)

6

(650)가

(600)

7

11,

7

가

1

8

(700)

1 8

N

1

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N-1

8

2

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8

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3

2

2

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3

4

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3

8

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8

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1

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4

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1

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1

8

, 7

(700)

가

64	(705),	(715)						
(730)		(700)						
가	(700)가		(710)	720)	가	4	6	
가								
9	, 7	가				(700)		
		가						
10	, 7	가 1	8	가		(700)	1	(710)가
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11	, 7	1	8	가				8
1				가				
(700)		(720)		가				
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(57)

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가

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2

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가

4.

1

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가

5.

1

,

가 가

6.

1

,

가

7.

1

,

(ruggedized)

가

()

8.

7

,

가

load bearing portions)

9.

1

,

(termination)가

10.

1

,

가

11.

10

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가

12.

1

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가

13.

12

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14.

**15.**

14 , 가

**16.**

14 , 2

**17.**

14 ,

**18.**

14 ,

**19.**

14 ,

**20.**

14 ,

**21.**

( 1 , 1 , 2 , 2 , ),

**22.**  
21 , 가 가**23.**  
21 , 가**24.**  
23 , 가 2**25.**  
21 , 가**26.**  
(a) 1 ,  
(b) 1 , 2 ,  
(c)**27.**  
(a) ( ) 1 , ( ) 1 , ( ) 2

,

(b)

(c) 가  
(terminating)

28.

(a) CAD  
,

(b) CAD

29.

(a) AD 가 , C  
,

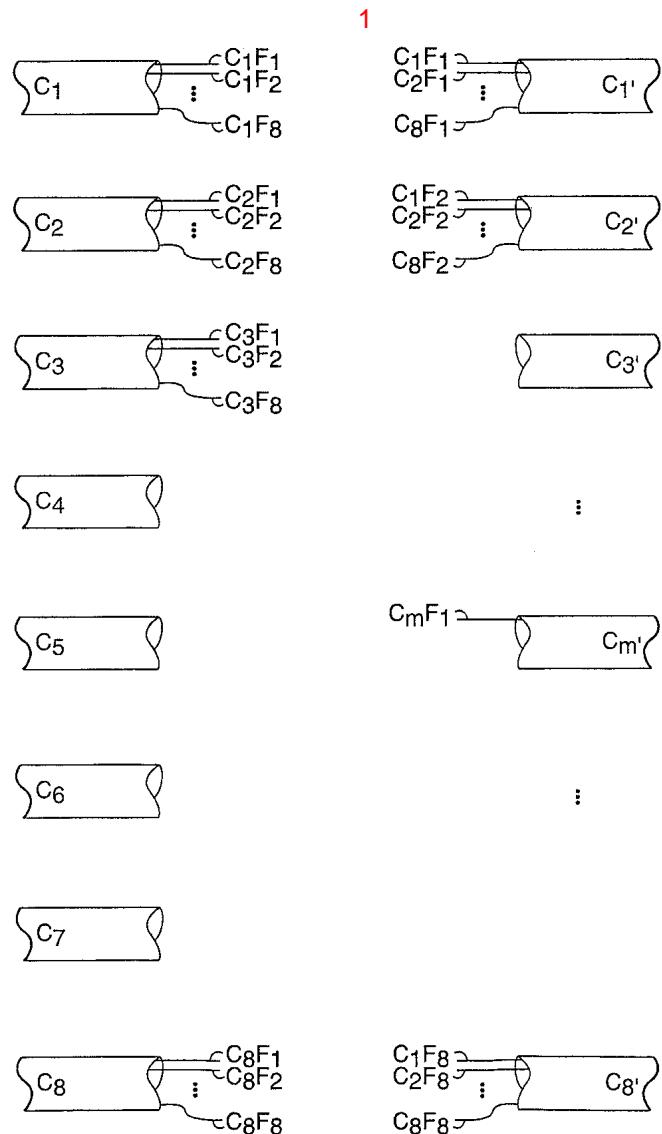
(b) CAD

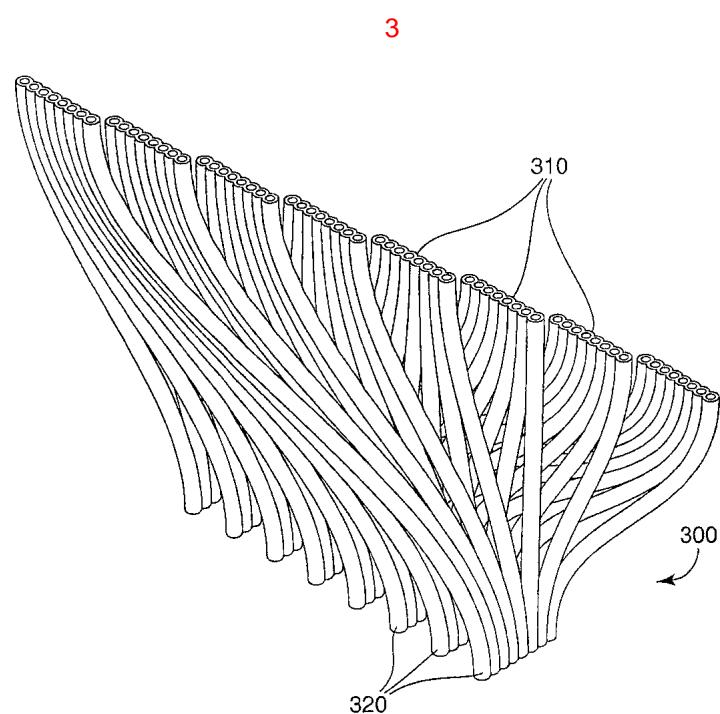
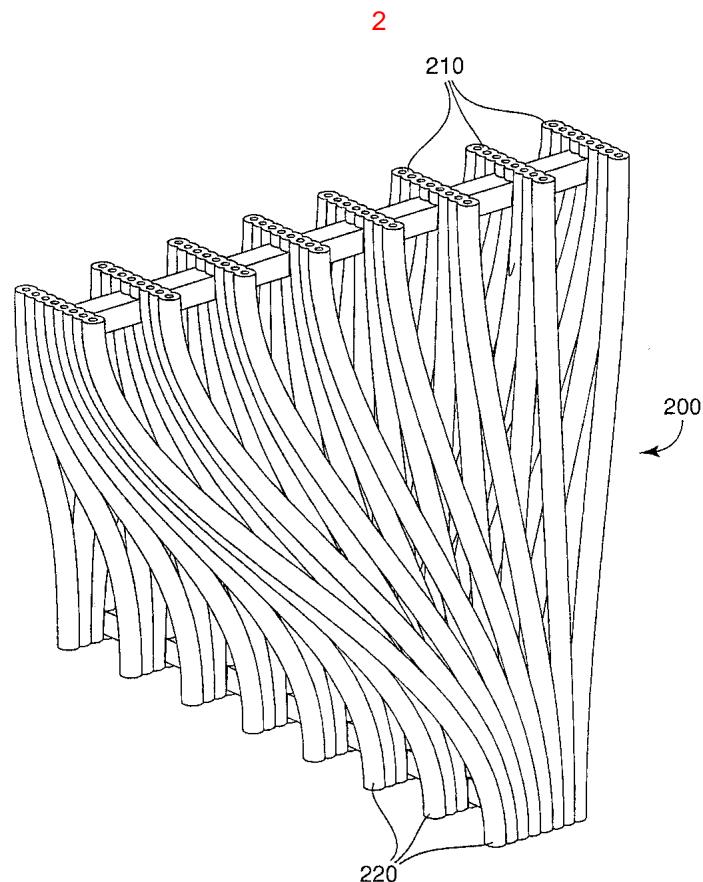
30.

(a) CAD  
,

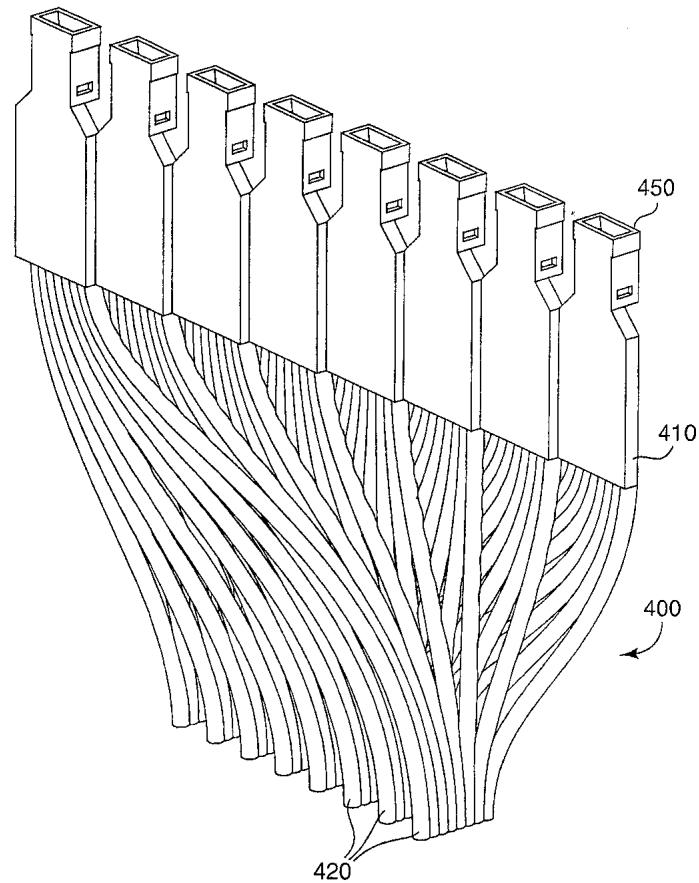
(b) CAD

31.

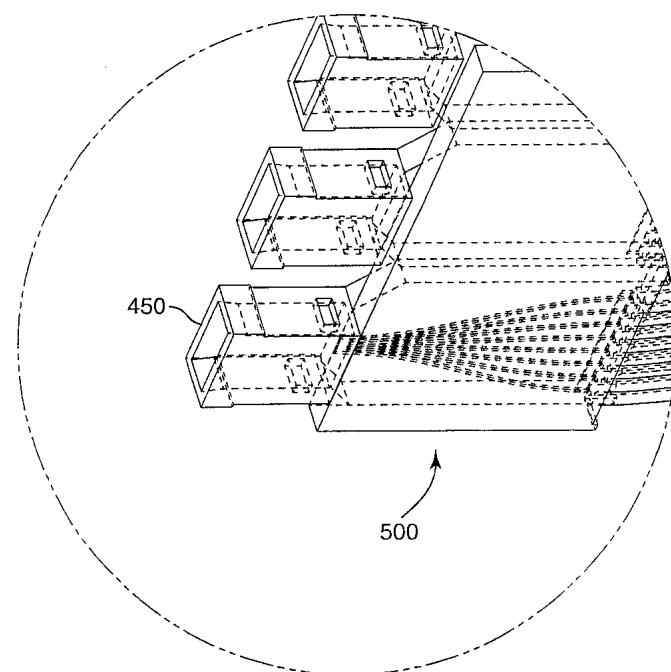


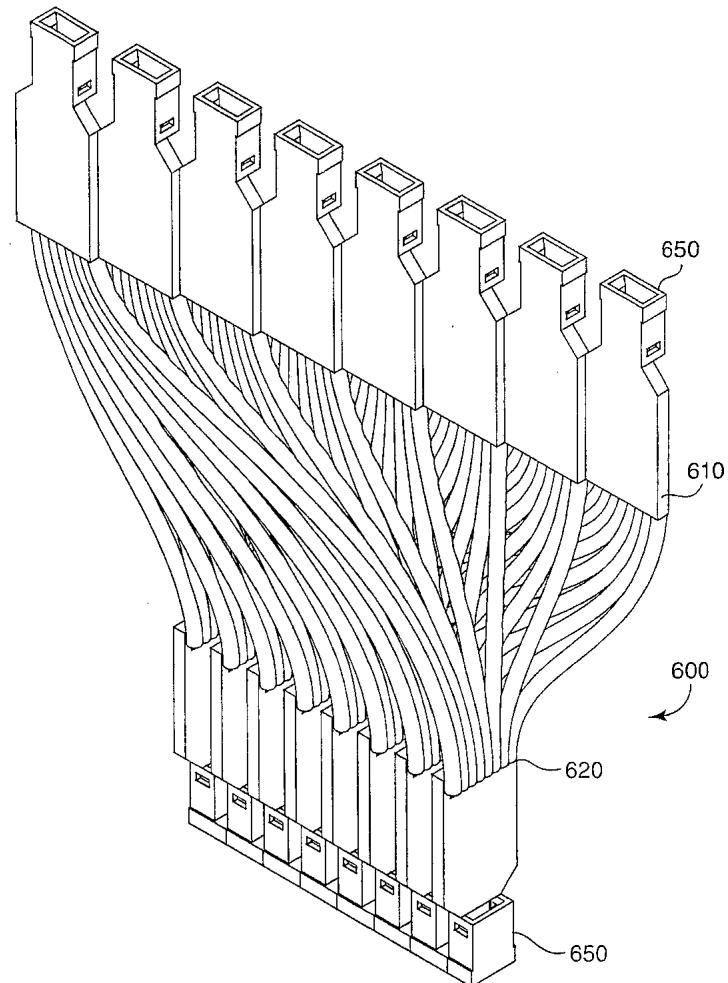


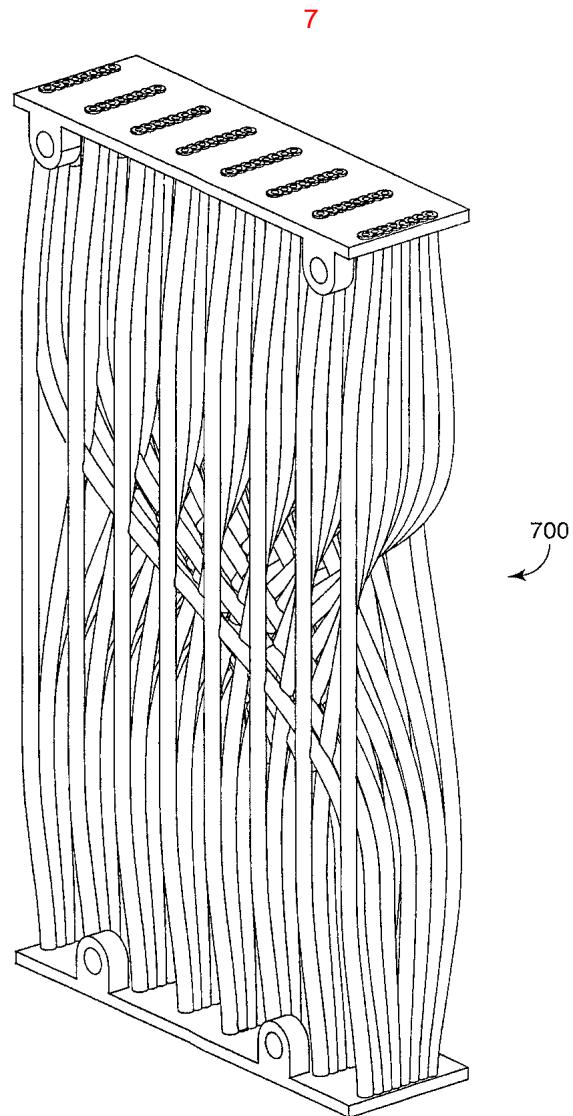
4

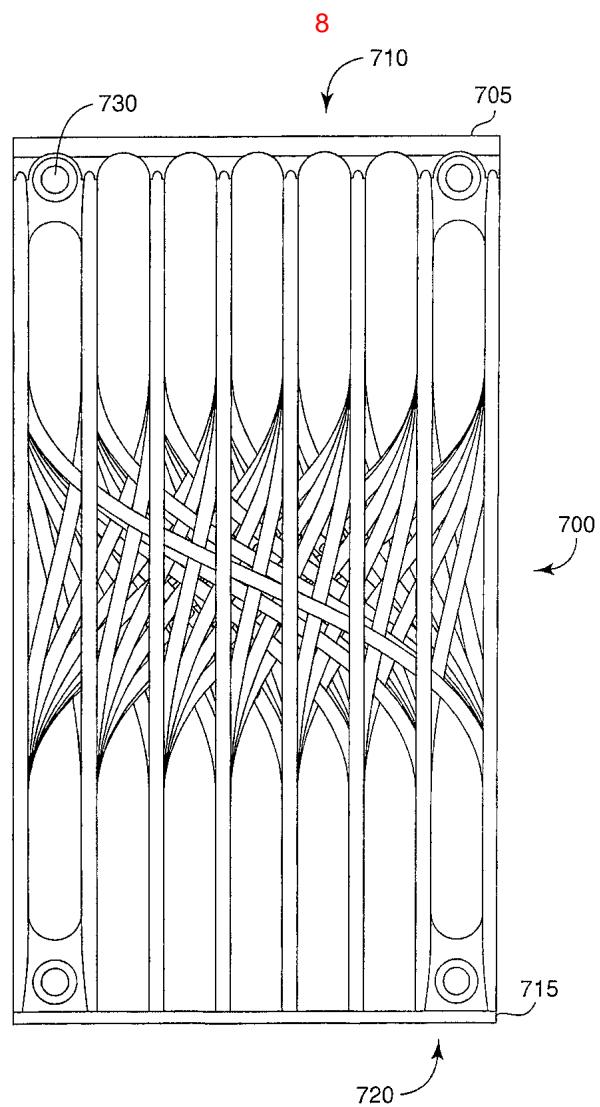


5

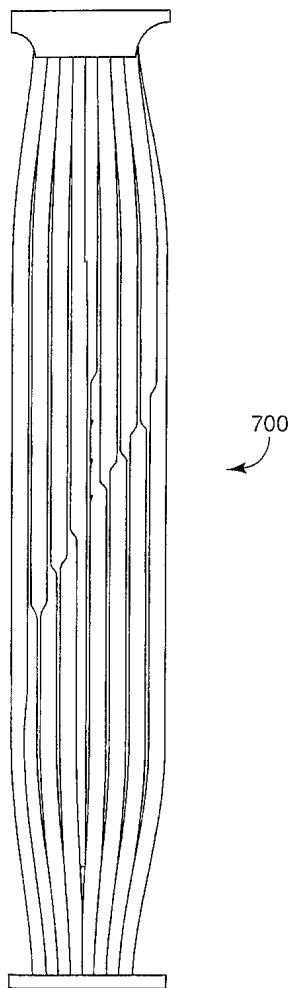




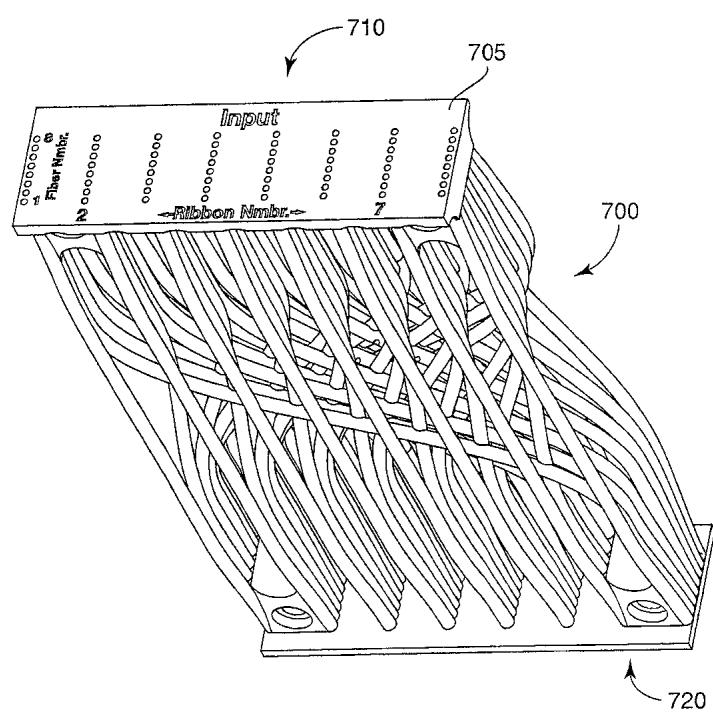


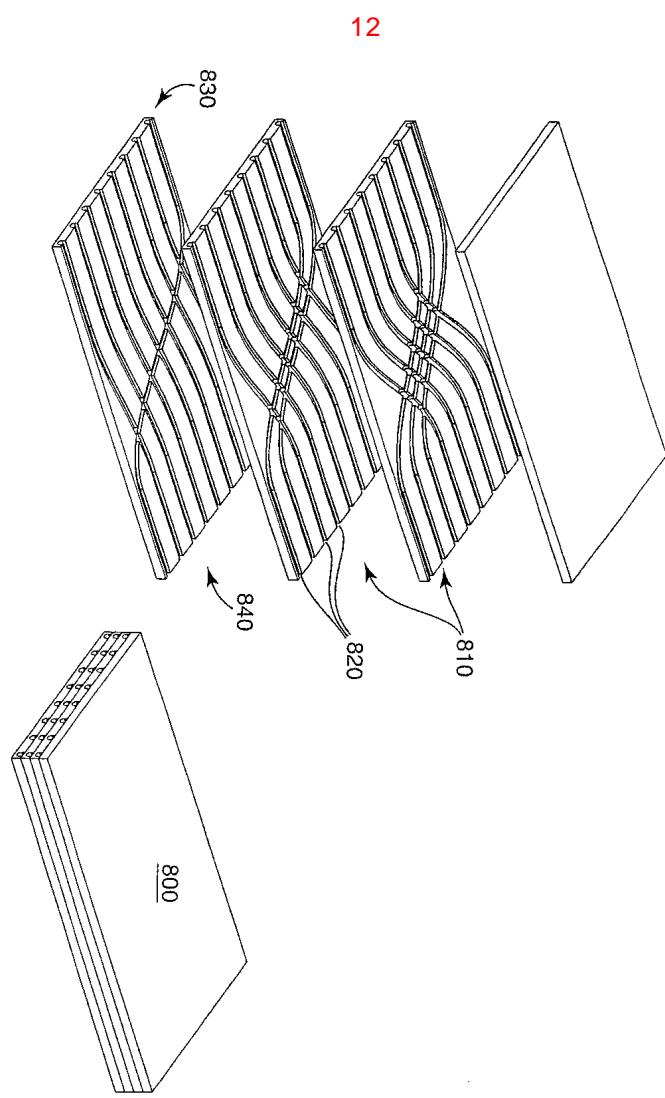
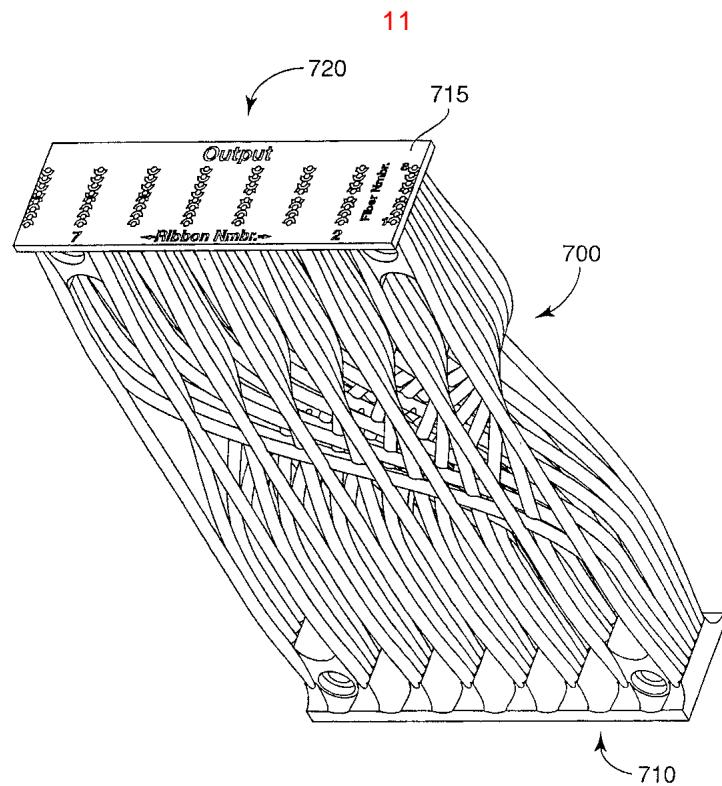


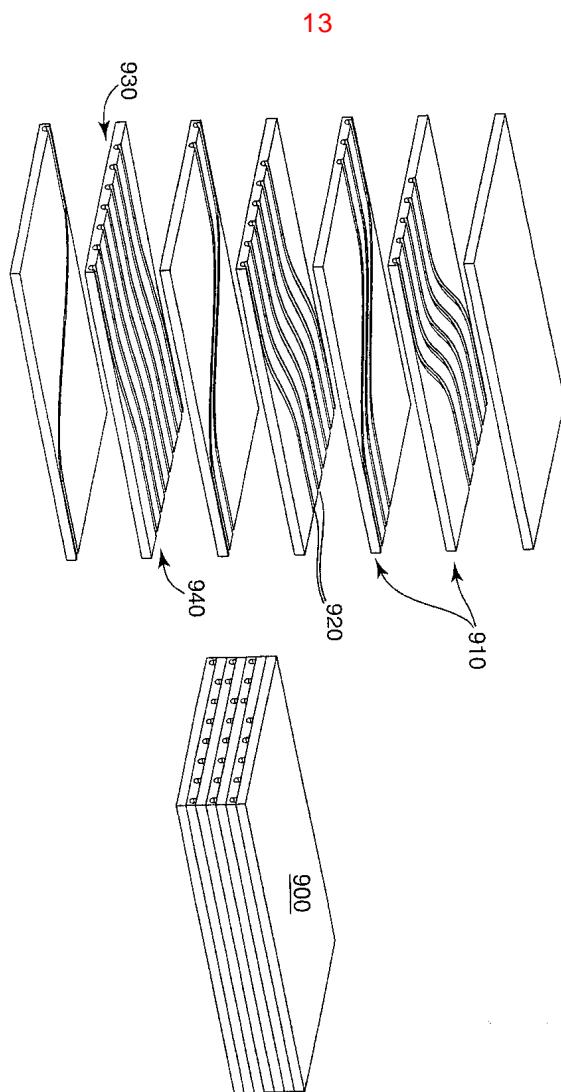
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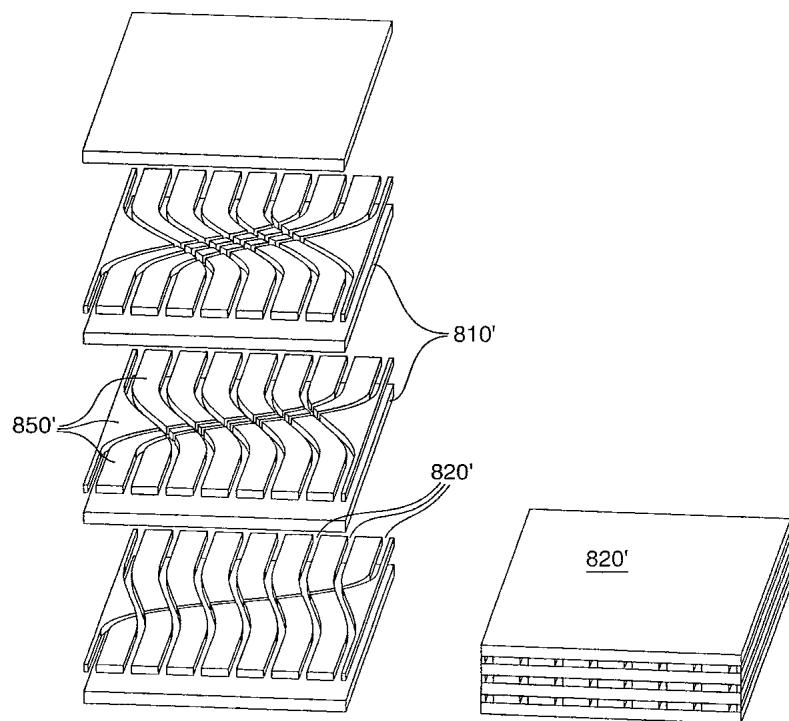


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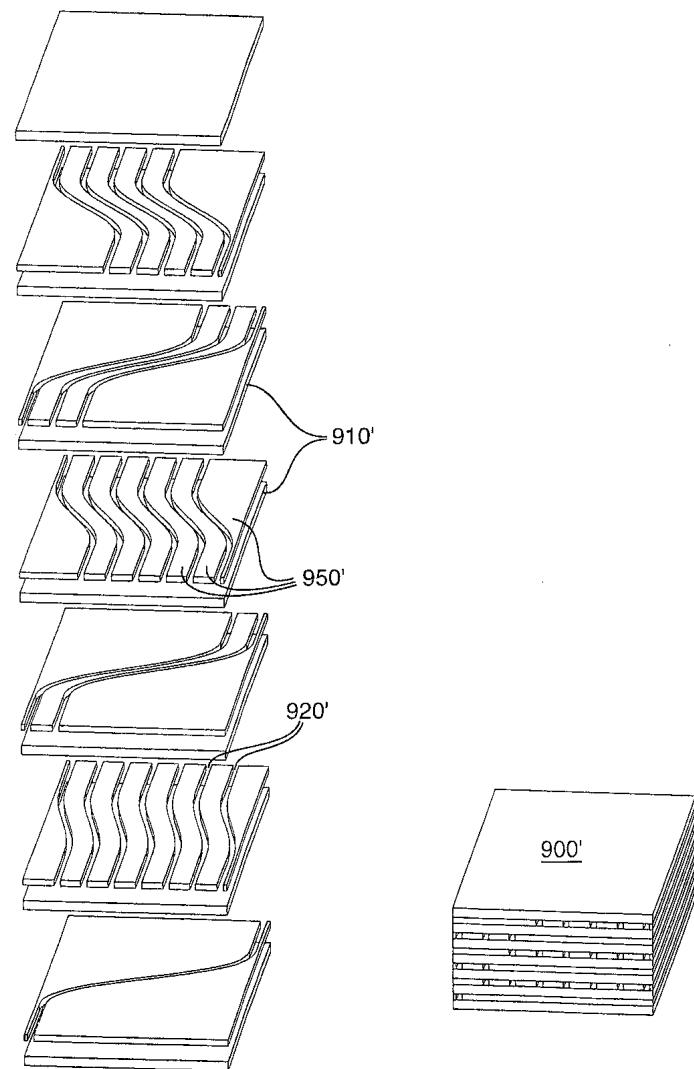


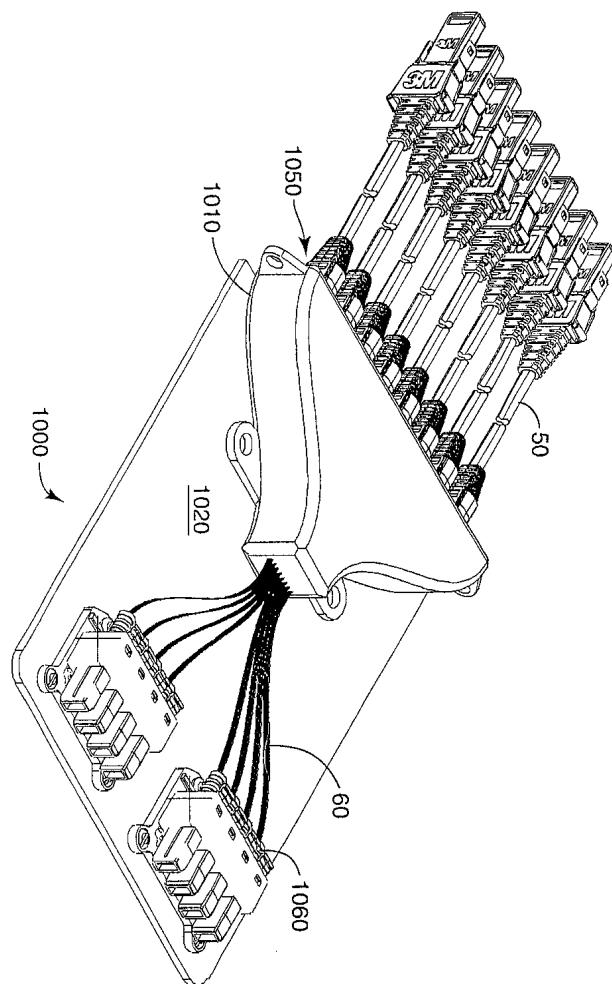




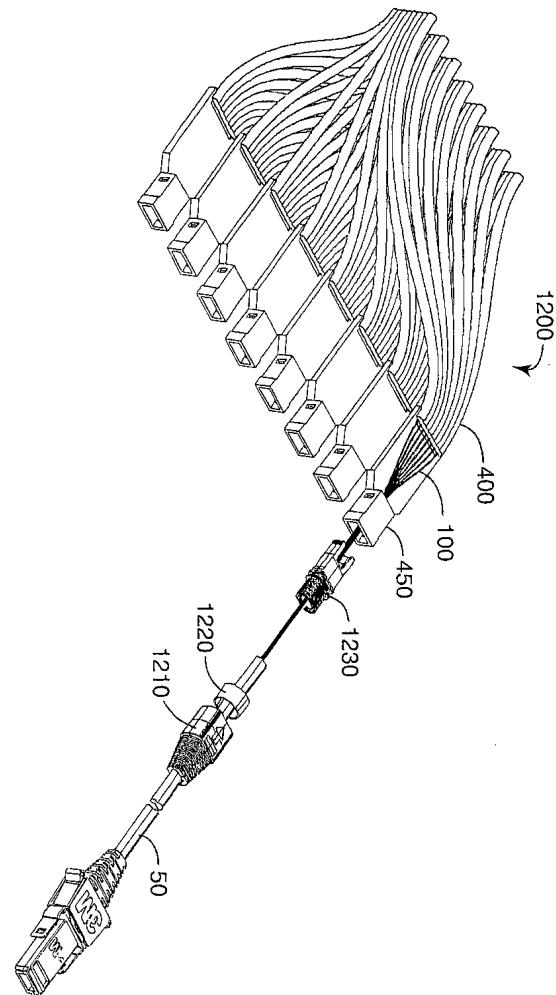


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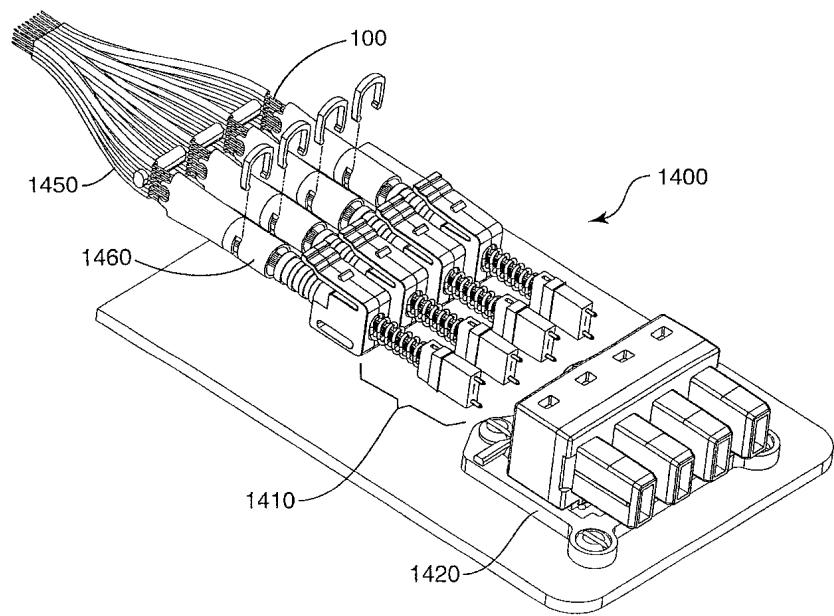




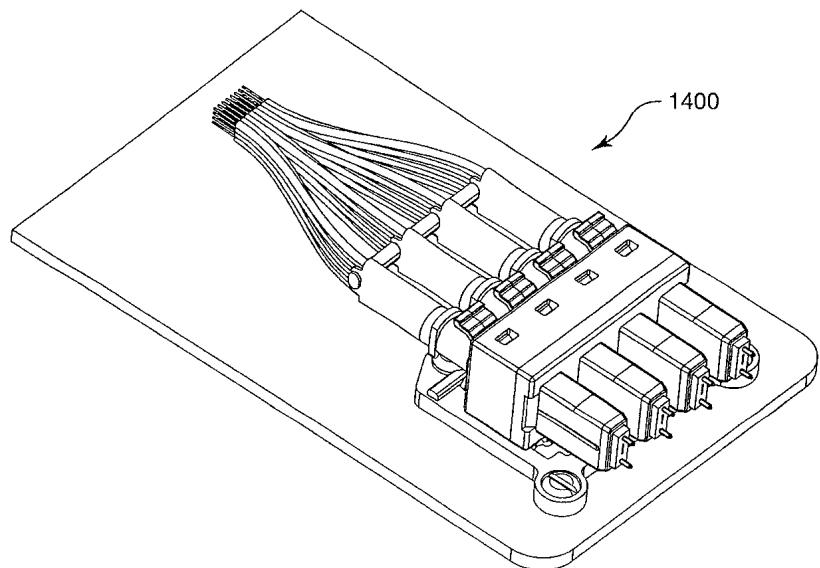
17



18



19



20

