

(19)  
(12)(KR)  
(A)(51) 。 Int. Cl.<sup>7</sup>  
D04B 1/14(11)  
(43)2003-0094342  
2003 12 11

(21) 10-2003-7013391  
 (22) 2003 10 11  
 2003 10 11  
 (86) PCT/IB2001/00609  
 (86) 2001 04 12

(87)  
(87)WO 2002/84002  
2002 10 24

(71) 55144-1000

(72) -95330 13

-78160

7

(74)

:

(54)

( , (1) )  
 가 (picking up) ,  
 (woven weaving) (knitted  
 (cleaning) (wiping)  
 가

(drag) ,  
 가 (mopping)  
 가

---

가  
 가  
 가  
 가  
 가  
 가  
 가  
 가  
 가

(Swiss pique) , (Lacoste) , (Honeycomb) , (French pique) ,  
 (Ottoman-Honeycomb)

가  
 2 가  
 2

2  
 2  
 2  
 2

가

가 1 -  
2 ,

가

가

가

가

1a 1f

2a 2b

2

3

4 2

5

6 9 4가

10 11 (isometric view) 10  
가 , 11 가

12 10 11

13

가



2  
 ; 2 2 2 2 2 2 1 ; 2 2 1  
 2 가 1 1 ; 2 2 1  
 1 - -  
 3, 6 7 1, 4, 5 8 2,  
 90 % 70~80 % ( ) 90~10 % 20~30 % 10~  
 ar density)' (fineness)' 150 가 9,000 (g) 40~300 (line  
 ) 150 가 34 ( DuPont 150 가 ) (PET  
 ('PVA') / PVA 가 PVA 가 1~300  
 PVA ( Nichibi KK 가 ) PVA 가 PVA 40  
 가,  
 % 70~80 % 10~90 % 20~30 % 90~10  
 2 2 2 2  
 ( )

1

2

(greige)

1

가  
) 가

( , 60 , 70~100

2

가

(

가

30 , 30 360 / , 120

180

).

EP

01105948.2 (2001 3 9

)

;

(wiping layer)

6

(40) 2  
(42)

(41)

(42

)  
)  
(41) (42)  
(42) , (40)가 가

(42)  
(fleece)

1 cm

(scouring application)

WO 97/49326

3

가 2,958,593 (Hoover )  
(42) (42) (40)

7

(42)

3 (43)

3

. 3가

(40)

(42)

40)

(scouring)

(40)

),

, 3 (43)

(

(42) 2

, 3 (43)  
(fastening hook)

(stitching)

8

(41)

(41)

9

(43) 가

(41)

(42)

(42)

가 (45)

(40)

(40) (40)

cm<sup>2</sup> 300 cm<sup>2</sup> 가 (wiping surface) (40) 110 cm<sup>2</sup> 400 cm<sup>2</sup> 200

---

10 11 (60) (50) (40)

(60) 12 (50) (70)

(50) (70)

2 2.5 (70) 1 2 (70)

(70) (50) 가 (70) 가

가 (50) (50) (54) (70) (70)

(55)

10 11 (50) 2 (51,52) 2 (50)

(53)( (50) 11 (50)

(56)

(50) 가 (50) 7.5 cm x 27 cm, 가 (50) 9 cm x 35 cm 6 cm x 20 cm,

14 cm x 50 cm (50) 12 cm x 40 cm 15 cm x 60 cm 가 ( )

(50) (40)

10 12 (40)

(40) (50) 가 가

(40) (40) 가 가

(46) ( ) (41)

(50) (40) 가 (41)

가

가

가

125 (pumice), (5  
 0 cm x20 cm) ) 0.400 g 3 30 cm x30 cm  
 1 2 g )  
 0.400 g  
 0.400 g %

60° ( -8192 8 (30 cm x30 cm)  
 k AG MICRO-GLOSS 60° 가 ) BYK Labotron Messtechni  
 1 (0.27 g) 5 cm 2 '5 2 :  
 cm x7 cm , 580 g ) 5 cm x7 cm ( ) (5  
 , 5 20 cm . 1, 3, 5, 10 15 , 60 5  
 1 , %  
 5

13 (94) 0.5 kN (95) (93  
 ) (96)가 Intron Dynamometer Model 1011( -78280 ( )  
 Intron SA 가 )  
 91) (90)  
 H- , 2 40 mm x40 mm 120 mm x190 mm  
 , (97)( )  
 , 가 108 mm x118 mm . 5 kg ( ) (98)  
 685 g . 1 kg  
 , 400 mm/ 150 mm



, N

2

1. ( ) 'SCOTCH-BRITE' High Performance Cloth' 가 ( 'HPW - Material'  
 ). (70% 30% )  
 ) . HPW - Material 150  
 (turf)- 5

2. (70% 30% )  
 ( 150 )  
 ( 'Lacoste - Material' ). 1a ,  
 1, 4, 5 8 , 2, 3, 6 7 ,  
 가 . Lacoste - Material 3 .

3. (Lacoste - Material ) 1 , ( ,  
 HPW - Material ) 2  
 ( 'Mixed - Material' ). Mixed Material (70% 1  
 30% ) ) 2 Mixed - Material 가  
 50 ) . Mixed - Material 가  
 Mixed - Material 4 .

, 3

, 3

1

[ 1 ]

|                    | (g)   |       |       |       | , %   |
|--------------------|-------|-------|-------|-------|-------|
|                    | 1     | 2     | 3     |       |       |
| HPW - Material     | 0.360 | 0.385 | 0.365 | 0.370 | 92.5% |
| Lacoste - Material | 0.339 | 0.334 | 0.334 | 0.336 | 84.0% |
| Mixed - Material   | 0.347 | 0.342 | 0.381 | 0.357 | 89.3% |

. Mixed - Material

HPW - Material

2 3

[ 2 ]

|                    |   | ( ) (%) |       |       |       |       |
|--------------------|---|---------|-------|-------|-------|-------|
|                    |   | 1       | 3     | 5     | 10    | 15    |
| HWP - Material     | 0 | 76.54   | 90.83 | 95.52 | 96.91 | 97.23 |
|                    | 5 | 76.95   | 90.07 | 93.28 | 96.16 | 96.58 |
| Lacoste - Material | 0 | 81.02   | 81.02 | 80.17 | 78.90 | 79.74 |
|                    | 5 | 84.98   | 78.27 | 78.81 | 77.95 | 79.95 |
| Mixed - Material   | 0 | 88.95   | 87.42 | 87.32 | 87.32 | 88.38 |
|                    | 5 | 90.20   | 88.64 | 88.00 | 88.00 | 87.30 |

[ 3 ]

|                    |   | ( ) (%) |       |       |       |       |
|--------------------|---|---------|-------|-------|-------|-------|
|                    |   | 1       | 3     | 5     | 10    | 15    |
| HWP - Material     | 0 | 84.97   | 86.56 | 87.06 | 88.57 | 87.83 |
|                    | 5 | 85.44   | 86.72 | 86.29 | 84.38 | 87.61 |
| Lacoste - Material | 0 | 84.14   | 86.05 | 86.05 | 87.42 | 87.74 |
|                    | 5 | 82.94   | 85.17 | 85.17 | 85.91 | 85.50 |
| Mixed - Material   | 0 | 86.93   | 83.41 | 84.96 | 86.88 | 86.56 |
|                    | 5 | 85.13   | 82.03 | 83.69 | 85.56 | 84.71 |

HPW Material

3가

2

4

[ 4 ]

|                    | (N)  |      |      |
|--------------------|------|------|------|
|                    | 1    | 2    | 3    |
| HWP - Material     | 3.24 | 3.28 | 3.32 |
| Lacoste - Material | 1.10 | 1.19 | 1.19 |
| Mixed - Material   | 1.65 | 1.74 | 1.74 |



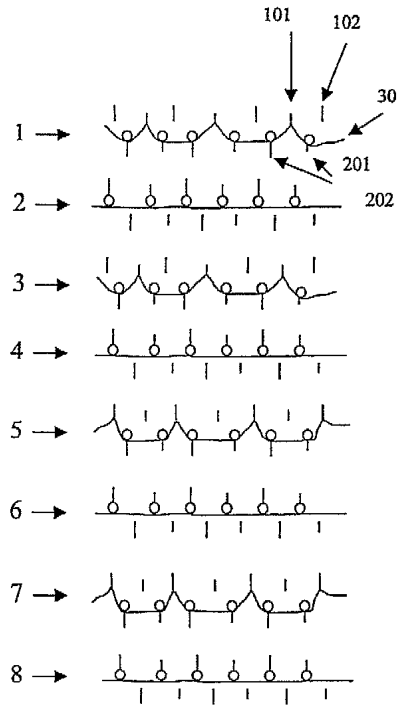
1

4

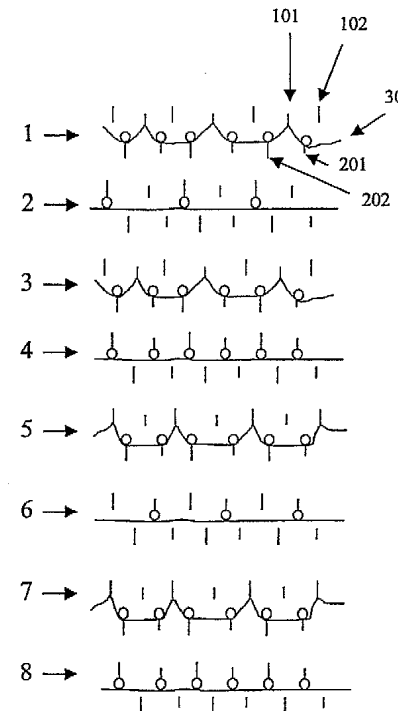
9

11

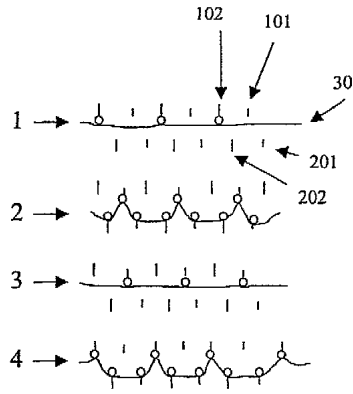
1a



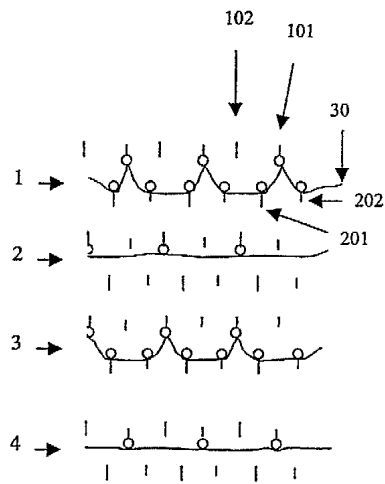
1b



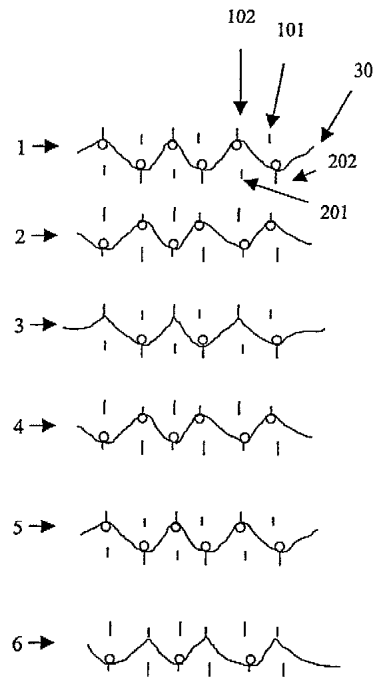
1c



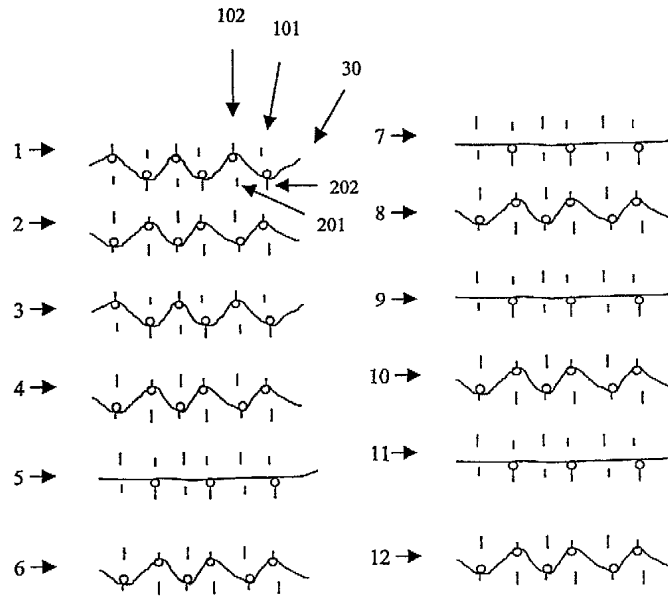
1d



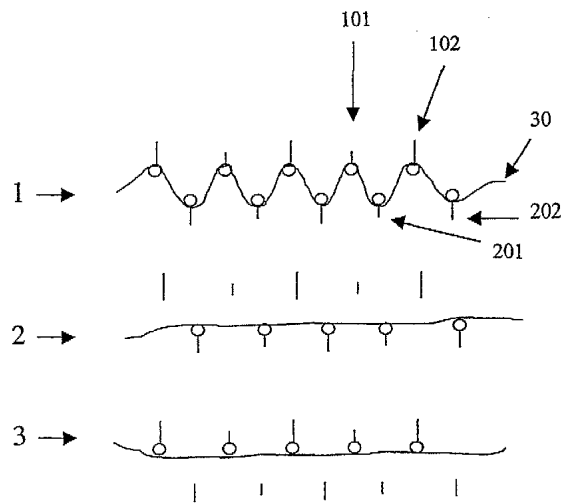
1e



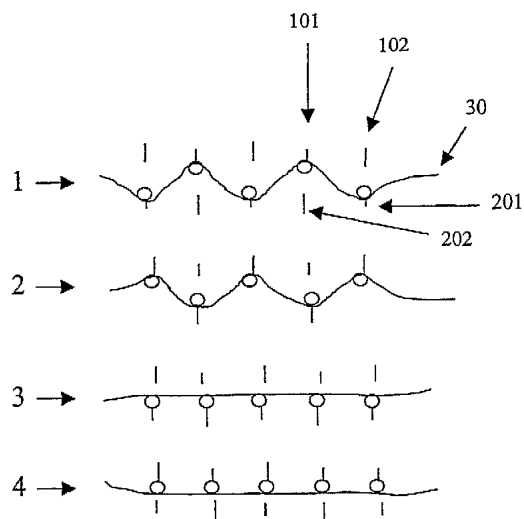
1f



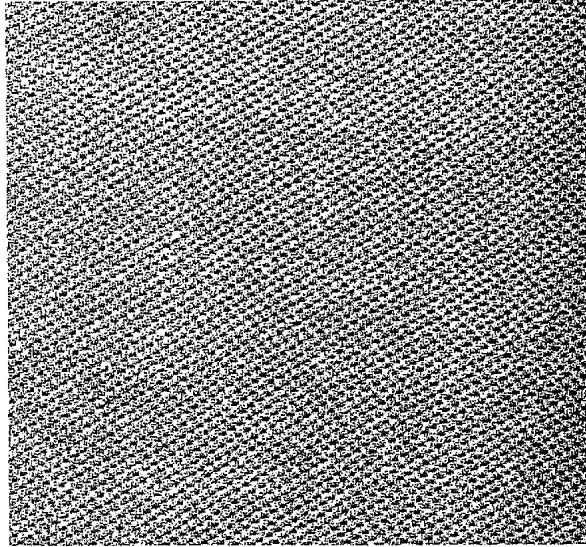
2a



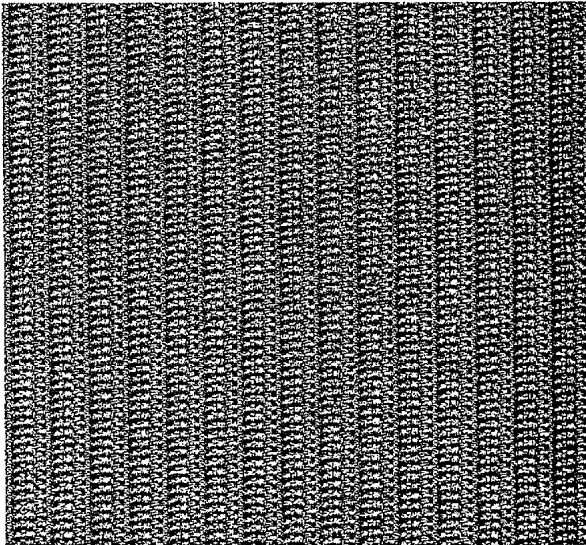
2b



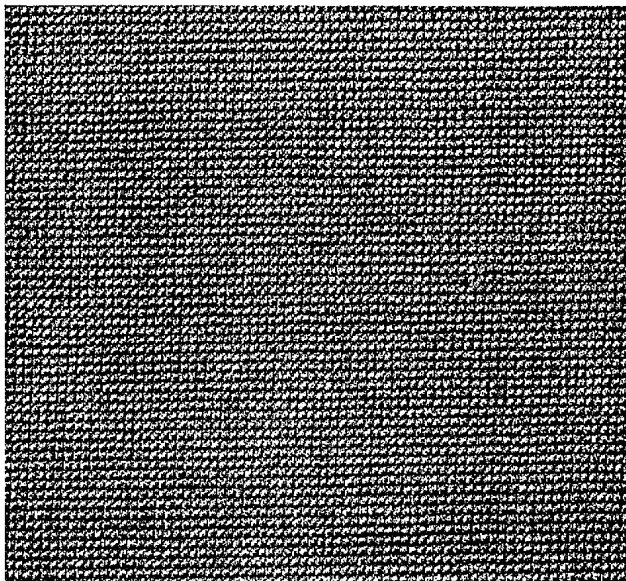
3



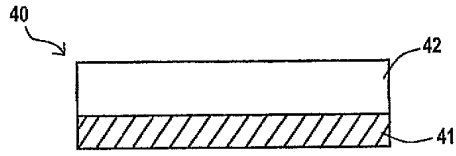
4



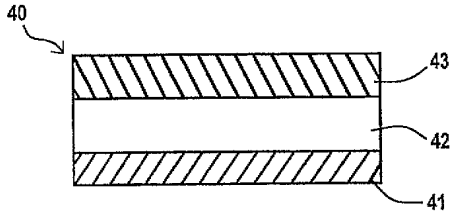
5



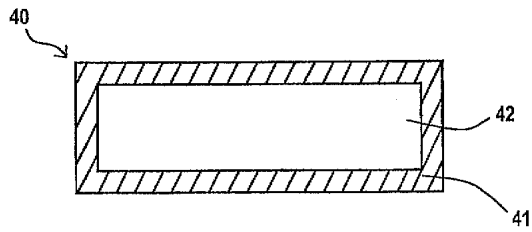
6



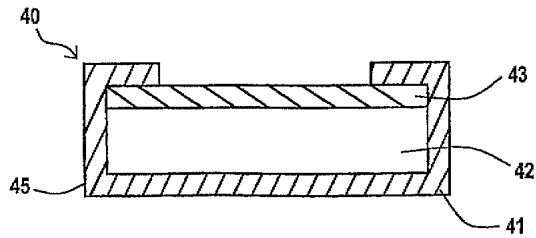
7



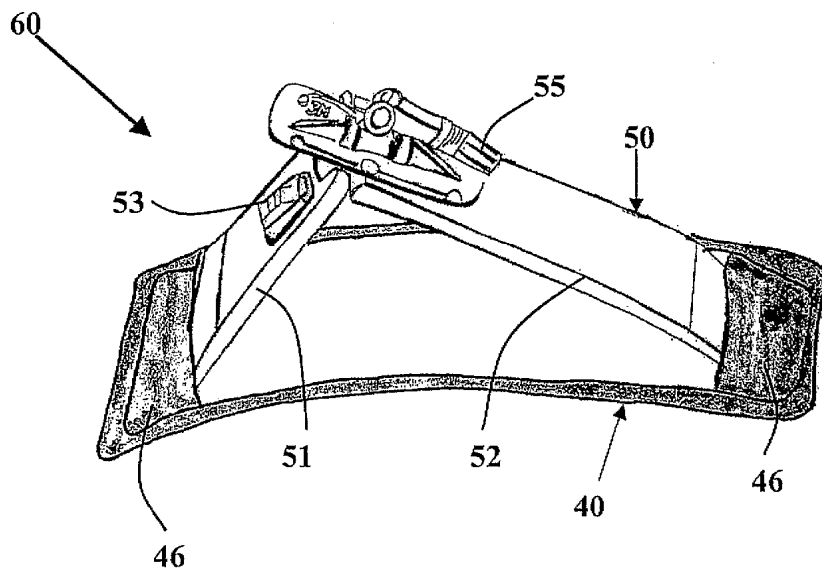
8



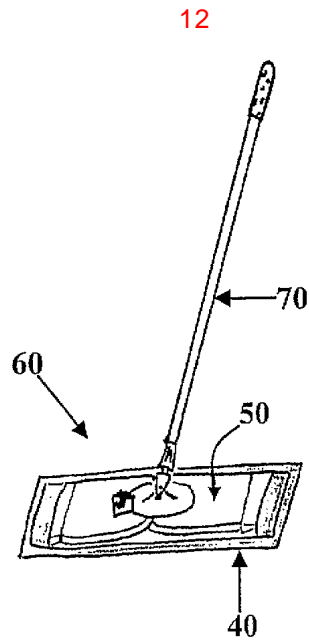
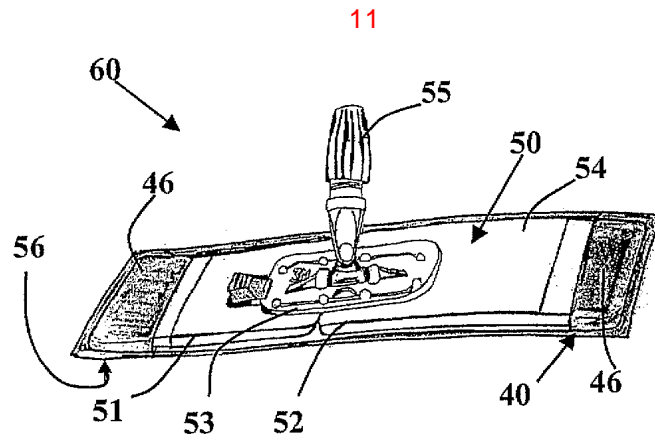
9



10







13

