

(19) (KR)
(12) (A)

(51) . Int. Cl. 7 (11) 2003 - 0014154
G11B 7/26 (43) 2003 02 15

(21) 10 - 2002 - 0047026
(22) 2002 08 09

(30) 60/311,638 2001 08 10 (US)
10/178,184 2002 06 21 (US)

$$(71) \quad , \quad , \quad , \quad , \quad 1400(\quad 18448)$$

(72) 18517 97

(74)

(54)

가 1
가 , 가
가 , ,
가 5 %

2

2

3 2 3 - 3

4 , 2

5 , 4

50 :

56 :

58 :

60 :

(single - substrate)

DVD

DVD

) 22 mm

,
80 mm DVD

33 mm

(

(環狀)

3

2
가 1.2 mm
0.6 mm

DVD

2

1.2 mm

DVD

0.6 mm 2

2

DVD
(player)

, 2 WO 98/10418, (固形)
, 1
spoke), (bump) (ring), , , 가
,
가

가

| | | | |
|-----------|-----|-----------|-------------|
| (52)[2] | DVD | (50)[2] | (50)[2 3] |
| 가 | . | 가 | . |
| " | [| " | " |
| " | (| " | ") |
| " | " | " | " |
| .] | . | (60) 가 | , |
| (50) | . | . | , |

0.6 mm (60) (50) , 3
 (56) , 1

(60) , 가 가 가 (60) , 가
 , , , , , , ,
 가 () 가) 1 3 %
 5 % , 2 3 , 2
 " 0.6 mm (58) , X 1 3 %
 X , (60) 가 X 5 % , X , 1 3 %
 , , , /
 , , ,
 4 5 (50') (56') 가 가 4 (60') 3 (60') 4 (60') 5
 (60") 3 60' (4) (56) A - A (50') 4
 가 60(3) 60' (4) (50") 3
 (60") (50") , 5
 B - B 3 , 3
 (60") (50")

, (50, 50', 50") (56) , (52)
 1 (52) (58) (58) (60, 60', 60") 1 (52) 1
 (60, 60', 60") (60, 60', 60") , T
 (,) ,
 , (1 3 %)

(60, 60', 60") [, (1) (56) (rib)(60), (2) (56)
 (60') (60') (3) (56) ,
 (60') []

(56)

3

1 3 %

(60)

가

(57)

1.

1

2

5 %

2.

1 1 3 %

1

2

3.

1

1 , ,

4.

3 , 1

0.6 mm

5.

1 ,

6.

5 ,

3

7.

5

8.

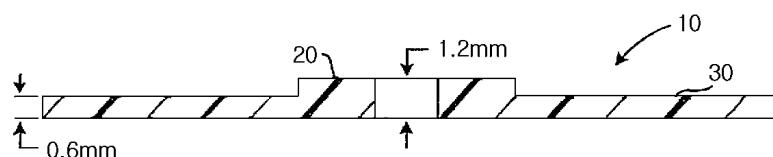
1

9.

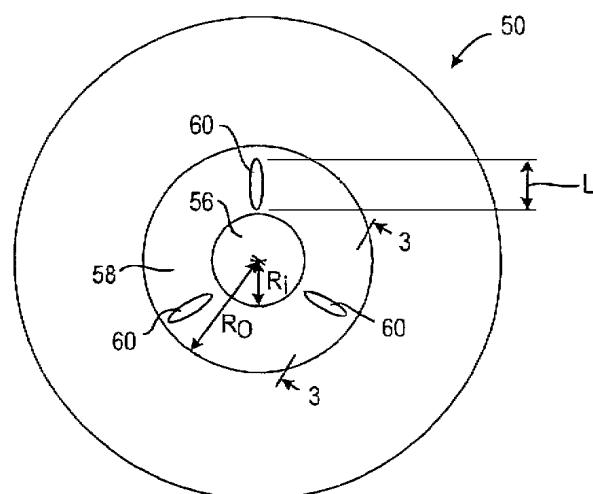
1

1

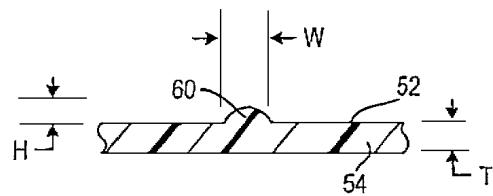
(종래 기술)



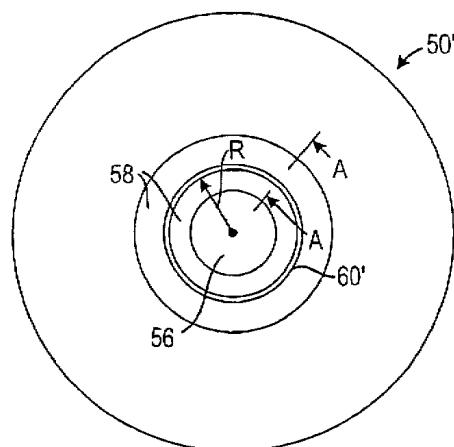
2



3



4



5

