

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

(51). Int. Cl.⁷
 G02B 27/28

(11)
 (43)

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	2004 05 17		
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(86)	2002 11 19	(87)	2003 06 26

(30)	01403044.9	2001 11 27	EP(EP)
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(71)	92648	46
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(72)	,	- 35830	7
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,	,	46038	가	9978
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,	,	46038		7594
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(74)

(54)

, 1	2	(27)	;	2
;	;		;	1
;	1			1
.	.			(30),
				(32)
		(26)	(20),	
		(24)		
			1/4	.
			(10)	

4a

, 1/4

LCD LCOS
 LCOS LCD (imager)
 (illumination) ,
 가
 (ray) (electrical field) 가
 , , ,
 , , ,
 1
 2
 , , ,
 4 90° ,
 , (integrating rod)(10232430)
 y eye lens (PBS) (array) PBS
 가 , PBS
 ,
 가 ,
 ,
 , LCD LCOS
 ,
 ,
 ,
 1/4 (plate)
 (integrator) ,
 ,
 ,
 ,
 1 2
 ; ;
 - ;
 2

; , 1 2 ; ; ; , 1 ; ; ; , 1 2 ; ; ; , 1 1 (forward direction)

1 (pipe) (rod)

2(a) 2(b)

3(a) 3(b)

4(a), 4(b), 4(c) 4(d)

5 (waveform)

, LCD LCOS(liquid crystal on silicon) (12)
 (10) 1 . (reflector)(1)
 4) (18) , (14) (image)(16) (20)
 (22) (20) (integrator), (24)

4(a)~4(d) , (30) , (38) . 4(a) Moxtek Proflux

	4(a)	(27)	1/4	(32)
1/4	4(b)		(18)	1/
4		4(a) 4(b)		
;			.	.
4(c) 4(d)			(26)	
,	Unaxis	Silflex		.
4(a) 4(b)			4(c) 4(d)	,
(34)	(27)	(38)	(assembly)	,
,	,	(27)	45 °	,
,	,	(40)	45 °	4(d)
			90 °	

ilm)(42) (27) , . . . (retardation f
line) 4(c) , 4(d) (dashed

	Radiant	16 (side)	.	ASAP	,	11.08 x 6.23mm	.	
).	p	85%	,	Moxtek	Proflux	98%	.	(Silflex
1/4		85%	s	5	3.25mm	가	,	,
		0.472	.	.	.	가	,	,
가	,		.	.	.	가	,	Moxtek
	s		.	.	.	가	,	,
3			,	,	6.33mm	.	.	0.32
			,	,	G = 0.472/0.323 = 1.46	,	,	

PBS

,	,					
,	,	(gap)	(burner)	,		1.3mm
,	,	가		,	PBS	
,	,	(tooling)		,		
5	,	1		(light flux)	6.33mm	,
,	,			,		
,	,	32.3%	가			32.3%
,	,	가		가	,	
3.25mm				47.2%	,	
					46%	

(57)

1.

$$(20) - \begin{matrix} 1 & 2 & (& & , p & s) \\ (18), & & 1 & & & \\ & & (30) & & - ; & \end{matrix} \quad (12)$$

(26);

1

(32)

2.

1

,

3.

2

,

1/4

4.

1

,

1/4

5.

4

,

6.

1

,

7.

2

,

8.

3

,

9.

1

,

10.

8

,

11.

1

,

1/4

12.

8

,

1/4

13.

1

,

1/4

14.

8

,

1/4

15.

1

,

,

16.

1

,

,

;

45 °

17.

1

,

,

45 °

90 °

1 2

18.

1 2

(24)

(10)

(forward direction)

;

1

;

2

;

1

;

1

1

19.

18

,

20.

18

, 1/4 1/4

21.

, (26)

(12);

(20);

(18) (27)

1 2 - 2
- (30);

- 1
(32)

22.

21

1

23.

21

, 1/4

24.

21

25.

21





