

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

(51) 。 Int. Cl.⁷ (11) 10-2004-0074610
G02F 1/1335 (43) 2004 08 25

(21) 10-2004-0010270
(22) 2004 02 17

(30) JP-P-2003-00041030 2003 02 19 (JP)

(71) 가 가
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(72) , 1 가 가
191-8511 1
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(74) :
:

(54) ,

1×10⁻¹³ Pa⁻¹ C(md)<C(td) , 80 , 90% RH 50 C(md), C(td)가 1×10⁻⁹
, S(td)가 -1 1% | S(md) | > | S(td) | , 1 R₀ 20 S(md)
t 가 70 400nm . 70nm , 2 R

$$R_0 = (n_x - n_y) \times d$$

$$R_t = \{ (n_x + n_y) / 2 - n_z \} \times d$$

[1] C(md), C(td)가 1×10^{-9} $1 \times 10^{-}$
 13 Pa^{-1} C(md)<C(td) , 1 (R₀)가
 $20 \text{ } 70\text{nm}$, 2 (R_t)가 70
 400nm , 80 , 90% RH 50
S(md), S(td)가 -1 1% | S(md) | > | S(td) | .

[1]

$$R_0 = (n_x - n_y) \times d$$

[2]

$$R_t = \{ (n_x + n_y) / 2 - n_z \} \times d$$

, nx (遅相軸) () , ny (進相軸) ()
), nz , d , .

[2] [1] , 1 .

[3] [1] [2] , 가 4 5 .

$$2.55 \leq X + Y \leq 2.85$$

$$1.4 \leq X \leq 2.85$$

, X , Y () .

[4] [1] [3] , 가 5
9.0 61.5% , 100 2 가 0.1 20 .

[5] [1] [4] ,
가 .

[6] [1] [5] , 가 .

[7] 2 , 1 [1] [6] .

[8] [7] 가 .

가 가 가 . , 가
R₀)가 20 (70nm ,) (R_t)가 70 400nm . (

[illegible]

td , 40 120 50 200N
 td 가 , 400
 0×10^{-14} $C(\text{td}) \times |S(\text{td})| < 5$.
 $| < C(\text{md}) \times |S(\text{md})|$ 가 $C(\text{td}) \times |S(\text{td})|$
 D (: Pa^{-1}) , $S(\text{td})$ TD (: %) , $C(\text{md})$ MD
(: Pa^{-1}) , $S(\text{md})$ MD (: %)

(6) :

가 . 2 % , 0.4 %

$$(\%) = \{(M - N)/N\} \times 100$$

, M , N M 110 3

10 $75\mu\text{m}$ 가 , 10 $60\mu\text{m}$ 가 , 10 $40\mu\text{m}$ 가

가

가 ,

{ }

300,000 , 80,000 200,000 , 가 60,000

:

: $\text{MPW} \times 1()$

: 0.2 / %

: $1.0\text{M}\ell/$

: $300\mu\ell$

: (Mw=188, 200)

: 23 .

CH₃COCl, C₂H₅COCl, C₃H₇COCl) 10-45804

가
3 가 3 가

가

ASTM-D817-96

() 가 Y , 2.3 X+Y 2.85 , 1.4 X 2.85 X, ()

가 59.0 61.5% , 2 가
100 0.01 20 ,
가 .

[() 가]

2 가 , 2 가 ,

가 2 가 , 2 가 , 2 가 ,
가 가 . 2 가 , 5 , 10 가

가 2 20 , 2 12, , 6 (,
2 8 , , 5 , 5
, 6) , 7 , 6 , 가 , 가
, 2 가 , , 가
.

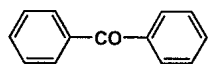
1,3,5-

2 (d) , (a) , (b) , (c) 가 (, , (b) (c) , 2 가 .

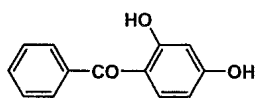
(a) (2)

[illegible]

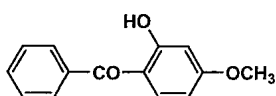
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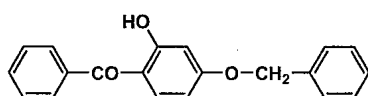
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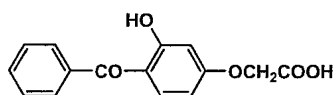
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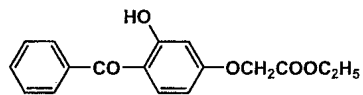
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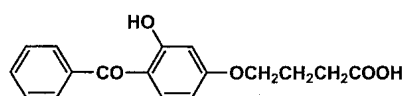
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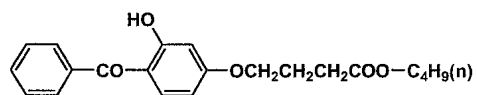
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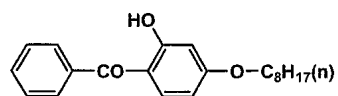
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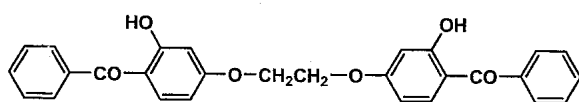
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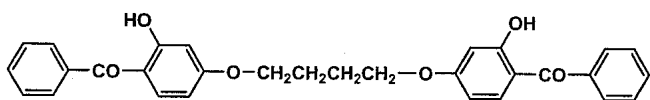
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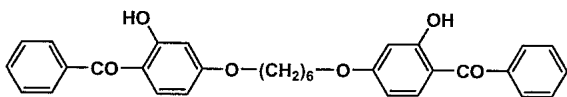
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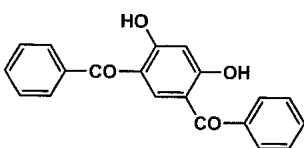
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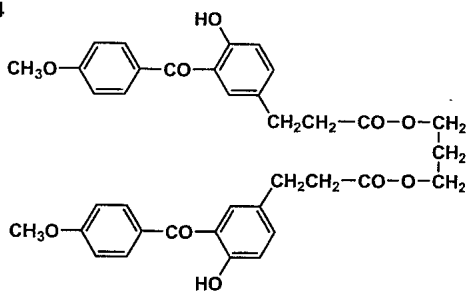
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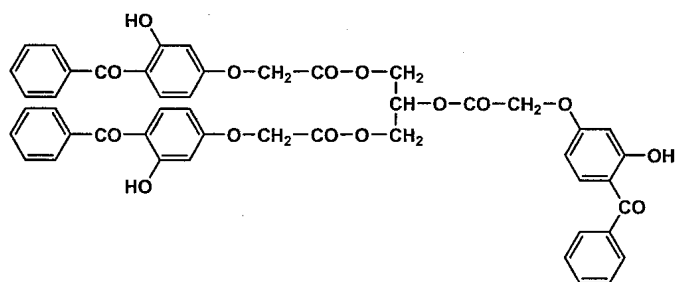
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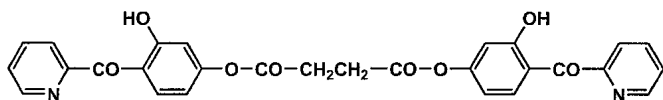
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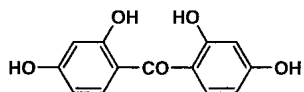
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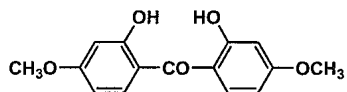
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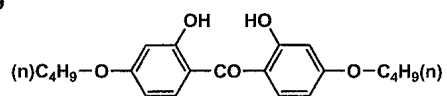
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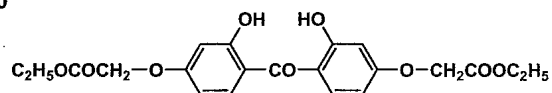
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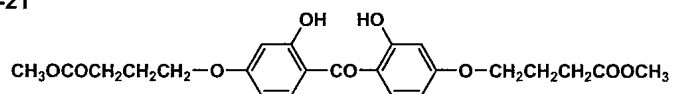
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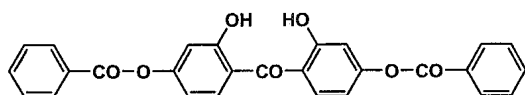
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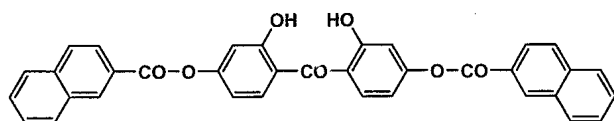
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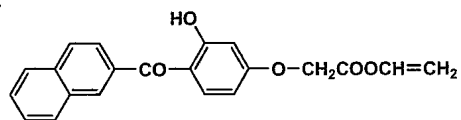
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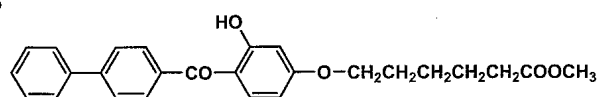
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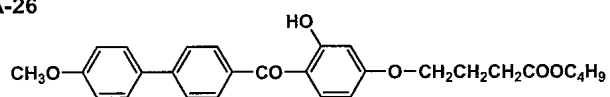
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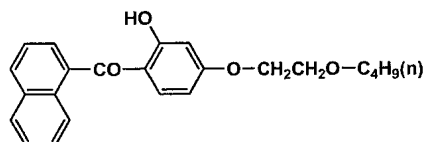
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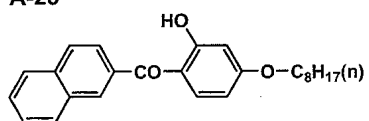
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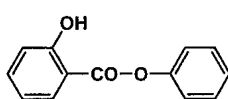
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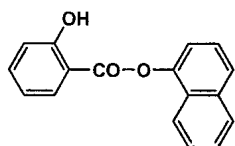
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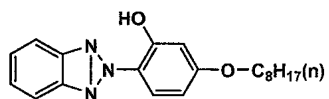
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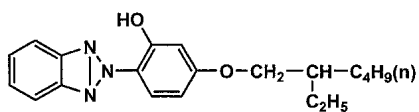
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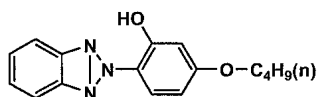
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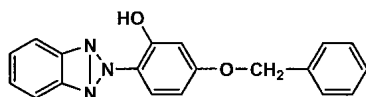
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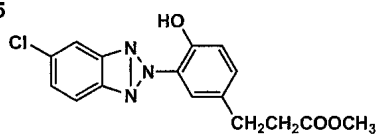
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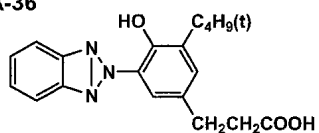
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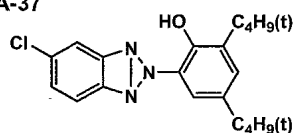
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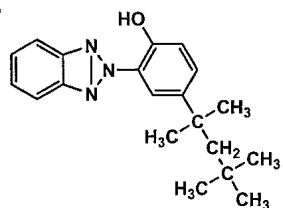
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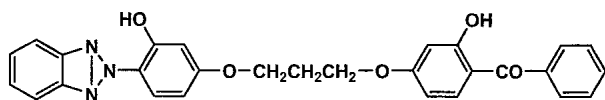
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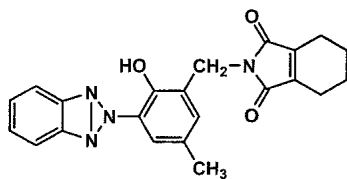
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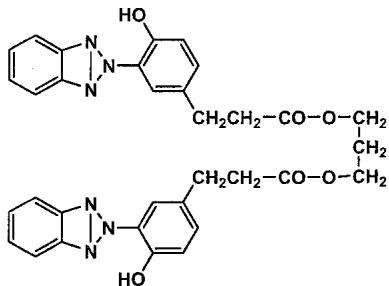
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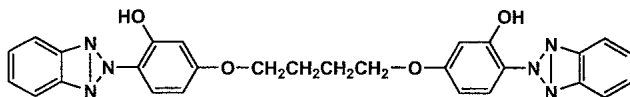
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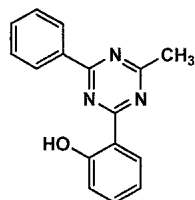
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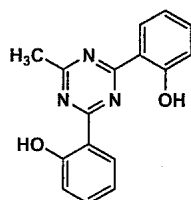
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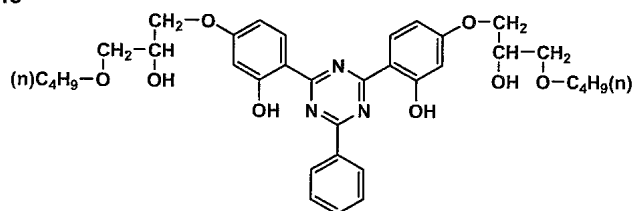
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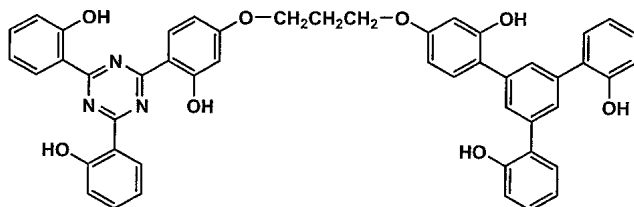
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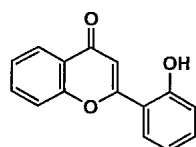
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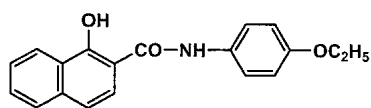
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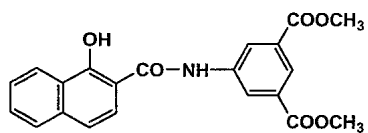
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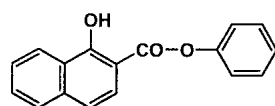
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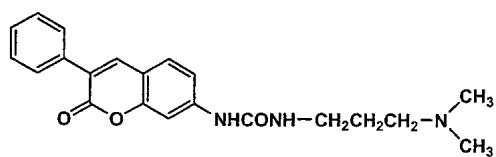
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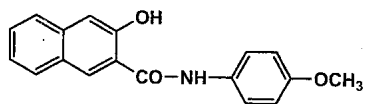
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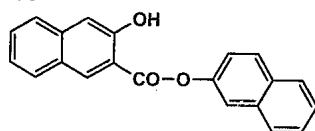
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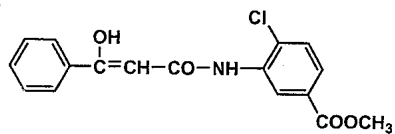
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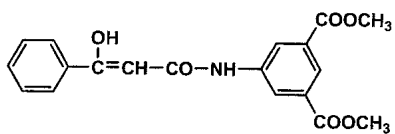
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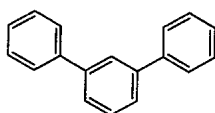
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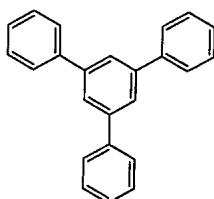
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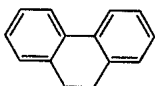
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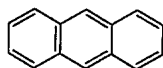
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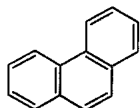
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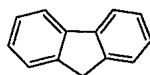
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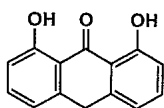
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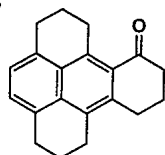
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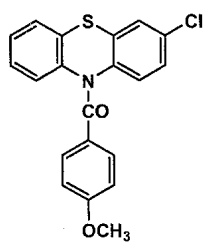
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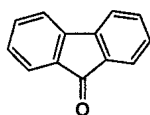
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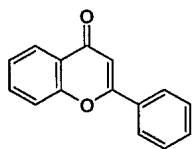
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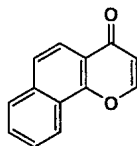
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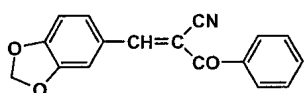
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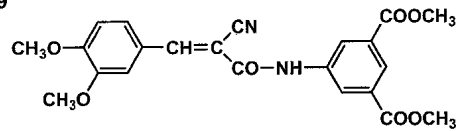
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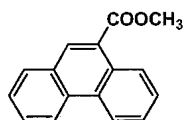
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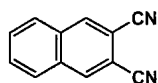
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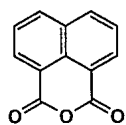
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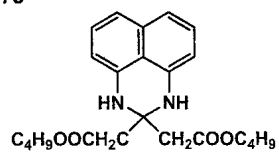
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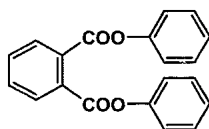
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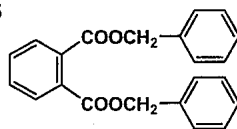
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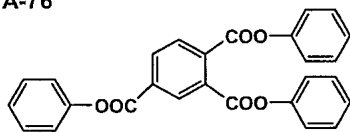
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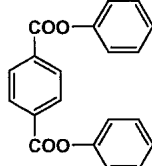
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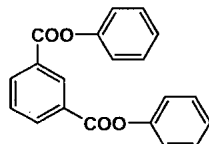
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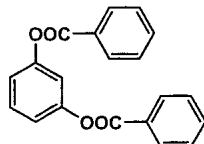
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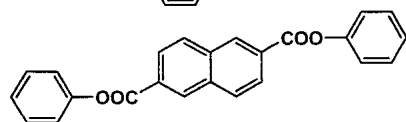
A-78



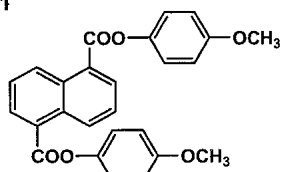
A-79



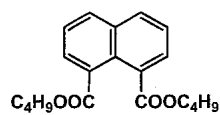
A-80



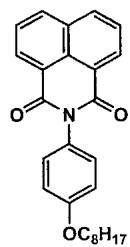
A-81



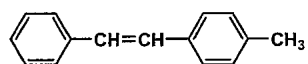
A-82



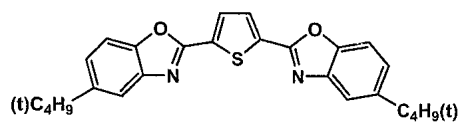
A-83



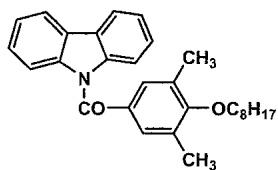
A-84



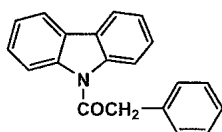
A-85



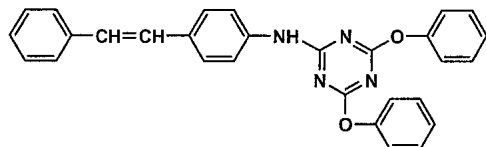
A-86



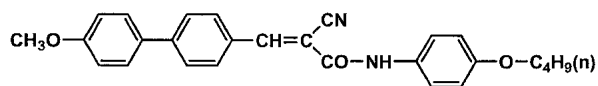
A-87



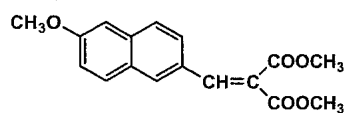
A-88



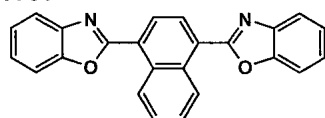
A-89



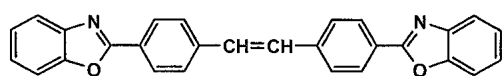
A-90



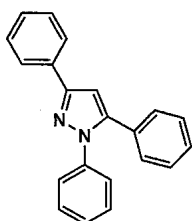
A-91



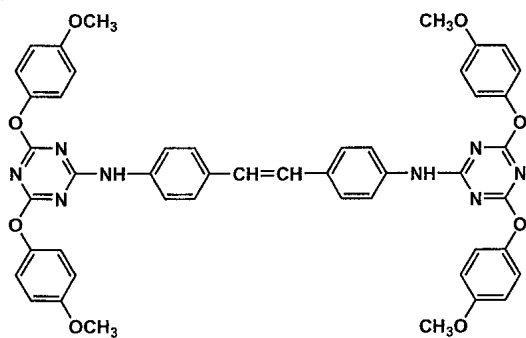
A-92



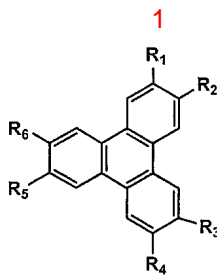
A-93



A-94



1 2 가 , 2 가 , 가 .



, R₁, R₂, R₃, R₄, R₅, R₆,
 , -O-R₁₁, -S-R₁₂, -CO-R₁₃, -O-CO-R₁₄, -CO-O-R₁₅, -O-CO-O-R₁₆, -NR₁₇,
 R₁₈, -CO-NR₁₉, R₂₀, -NR₂₁, -CO-R₂₂, -O-CO-NR₂₃, R₂₄, -SiR₂₅, R₂₆, R₂₇, -O-SiR₂₈, R₂₉, R₃₀,
 , -S-CO-R₃₁, -O-SO₂-R₃₂, -SO-R₃₃, -NR₃₄, -CO-O-R₃₅, -SO₂-R₃₆, -NR₃₇, -CO-NR₃₈, R₃₉,
 R₁₁, R₁₂, R₁₃, R₁₄, R₁₅, R₁₆, R₁₇, R₁₈, R₁₉, R₂₀, R₂₁, R₂₂, R₂₃, R₂₄, R₂₅, R₂₆,
 R₂₇, R₂₈, R₂₉, R₃₀, R₃₁, R₃₂, R₃₃, R₃₄, R₃₅, R₃₆, R₃₇, R₃₈, R₃₉,
 ; R₁, R₂, R₃, R₄, R₅, R₆,

R₁, R₂, R₃, R₄, R₅, R₆, -O-R₁₁, -S-R₁₂, -O-CO-R₁₄, -O-CO-O-R₁₆, -NR₁₇, R₁₈, -NR₂₁,
 -CO-R₂₂, -O-CO-NR₂₃, R₂₄, -O-R₁₁, -S-R₁₂, -O-CO-R₁₄, -O-CO-O-R₁₆, -O-CO-NR₂₃,
 R₂₄, -O-R₁₁, -O-CO-R₁₄, -O-CO-R₁₄,
 가 .

R₁₁, R₁₂, R₁₃, R₁₄, R₁₅, R₁₆, R₁₇, R₁₈, R₁₉, R₂₀, R₂₁, R₂₂, R₂₃, R₂₄, R₂₅, R₂₆, R₂₇,
 R₂₈, R₂₉, R₃₀, R₃₁, R₃₂, R₃₃, R₃₄, R₃₅, R₃₆, R₃₇, R₃₈, R₃₉,
 . -O-CO-R₁₄, R₁₄, 가 , 1, R₁, R₂, R₃, R₄, R₅, R₆.

(,) , 가 , 1, 3,
 0 , 1, 20 , 1, 10 가 ,
 , i- , i- , s- , t- , t- , , t- ,
 () , 가 , 2, 2,
 가 .

2, 30 , 2, 20 , 2, 10 가 ,
 , 3- () ,
 가 , 2, 3 가 ,
 2, 30 , 2, 20 , 2, 10 가 ,
 , 2- , 1- , 2,4- .

-O-R₄₁, -S-R₄₂, -CO-R₄₃, -O-CO-R₄₄, -CO-O-R₄₅, -O-CO-O-R₄₆, -NR₄₇, R₄₈, -CO-NR₄₉, R₅₀,
 -NR₅₁, -CO-R₅₂, -O-CO-NR₅₃, R₅₄, -SiR₅₅, R₅₆, R₅₇, R₅₈, -O-SiR₅₉, R₆₀, R₆₁, R₆₂, 가
 . R₄₁, R₄₂, R₄₃, R₄₄, R₄₅, R₄₆, R₄₇, R₄₈, R₄₉, R₅₀, R₅₁, R₅₂, R₅₃, R₅₄, R₅₅, R₅₆, R₅₇,
 R₅₈, R₅₉, R₆₀, R₆₁, R₆₂, , , .

2- , 2- , 2- , 2- , 2- , 2- ,
) , 2- , 4- ,
 , 4- , 4- ,
 , 4- ,

6, 20 , 6, 10 가 , 6, 30 , 1- , 2- ,
 -O-R₇₁, -S-R₇₂, -CO-R₇₃, -O-CO-R₇₄, -CO-O-R₇₅, -O-CO-O-R₇₆, -NR₇₇, R₇₈, -CO-NR₇₉,

$$R_{80}, -NR_{81}-CO-R_{82}, -O-CO-NR_{83}R_{84}, -SiR_{85}R_{86}R_{87}R_{88} \quad -O-SiR_{89}R_{90}R_{91}R_{92} \text{ 가}$$
$$R_{71}, R_{72}, R_{73}, R_{74}, R_{75}, R_{76}, R_{77}, R_{78}, R_{79}, R_{80}, R_{81}, R_{82}, R_{83}, R_{84}, R_{85}, R_{86}, R_{87}, R_{88}, R_{89}, R_{90}, R_{91}, R_{92},$$

, 3- , 4- , 2- , 3- , 4- p- , 4- , 2- , 3- , 4-
 - , 2- , 3- , 4- , 2- , 3- , 4- , 2-
 - , 3- , 4- , 2- , 3- , 4- , 2-
 , 3- , 4- , 2- , 3- , 4- , 2-
 , 2,4- , 2,4- , 2,4- , 3,5- , 3,4- , 3,4- , 3,5- , 3,5-
 - , 3,4,5- , 3,4,5- , 3,4,5- , 2,4,6- ,
 2,4,6- , 2,4,6- , 2- , 3- , 4- , 2- ,
 3- , 4- , 2- , 3- , 4- , 3,4- , 3,4- ,
 , 3,4- , 2,4- , 2,4- , 2,4- , 3,5- , 3,5- ,
 , 3,5- , 3,4,5- , 3,4,5- , 3,4,5- , 2,4,6- ,
 , 2,4,6- , 2,4,6- , , , 2- ,
 , 3- , 4- , 2- , 3- , 4- , 2- , 3- ,
 4- , 2- , 3- , 4- , o- , m- , p- , 2- , 3- ,
 , 4- , 2-(2-) , 3-(2-) , 4-(2-) , 2- ,
 , 3- , 4- , 2- , 3- , 4-

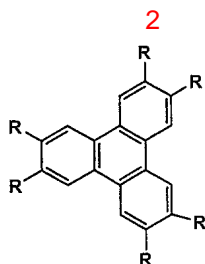
가 5 6 B, N, O, S, Se Te , , 2- -1,3- 1,3-

가	300	2000	.	260
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· , (, TG/DTA 100,

1 R₁ R₆ 가 6 가 가 2

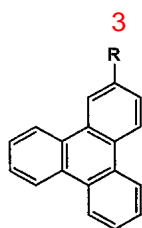
R



R
(B-8)
(B-13)
(B-17)N-
(B-22)m-
(B-26)p-
(B-32)2-
(B-37)2-
(B-41)p-
(B-45)4-
(B-1)
(B-2)
(B-3)
(B-4)
(B-5)
(B-6)
(B-7)
(B-9)
(B-10)1-
(B-14)N-
(B-18)
(B-23)t-
(B-27)
(B-28)
(B-33)2-
(B-38)2,4-
(B-42)m-
(B-46)
(B-11)
(B-15)N,N-
(B-19)4-
(B-24)p-
(B-29)
(B-34)3-
(B-39)
(B-43)o-
(B-47)p-
(B-12)2-
(B-16)4-
(B-20)
(B-21)
(B-25)
(B-30)2-
(B-35)2-
(B-40)
(B-44)m-
(B-48)1-

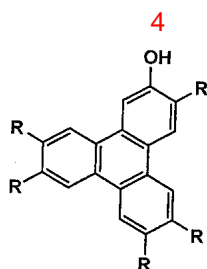
, (B-49)2- , (B-50)5- , (B-51)o- , (B-52)m- (2
 -) , (B-53)o- , (B-54)p- , (B-55)m-
 , (B-56)p- , (B-57) , (B-58) , (B-59) , (B-
 60) , (B-61) , (B-62)m- , (B-63)
 , (B-64) , (B-65)4- , (B-66)3- , (B-67)
 2- , (B-68) , (B-69) , (B-70)p- , (B-7)
 1) , (B-72)m- , (B-73) , (B-74) , (B-75)4- , (B-76)
 , (B-77)m- , (B-78)4- .

1 R₁ R₆ 5 가 1 가 R 가
 3 R



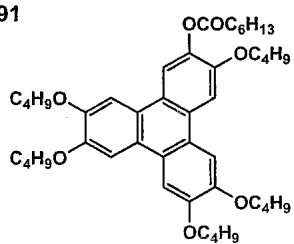
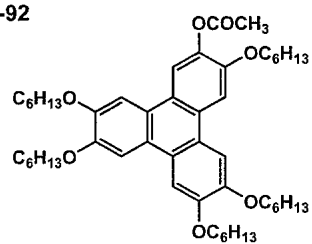
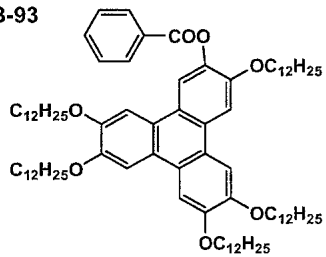
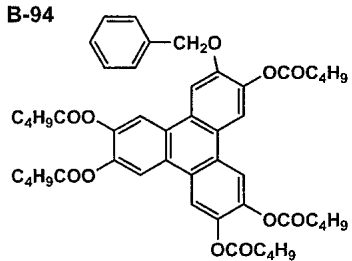
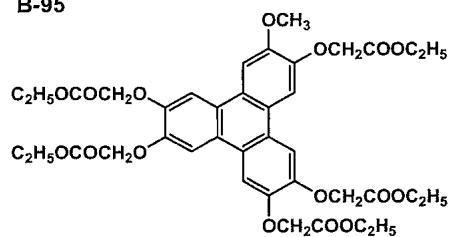
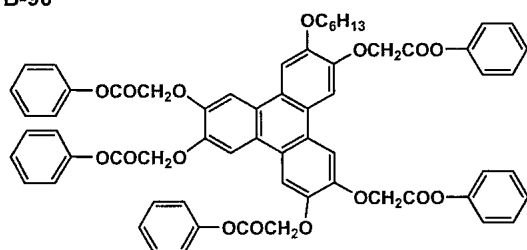
R , (B-79) , (B-80) , (B-81) , (B-82) , (B-83) , (B-84)
 , (B-85) .

1 R₁ , R₂ R₆ 5 가 R 가
 4 R

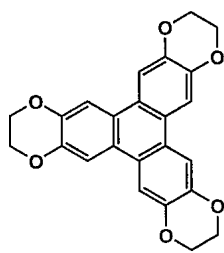


R , (B-86) , (B-87) , (B-88) , (B-89) , (B-90)

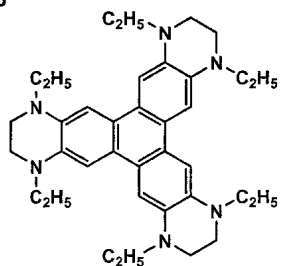
1 R₁ R₅ , B-91 B-100 .

B-91**B-92****B-93****B-94****B-95****B-96**

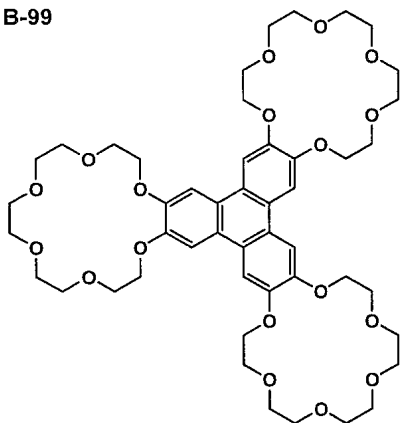
B-97



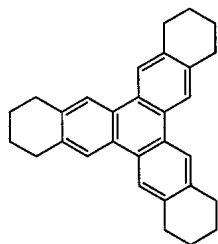
B-98



B-99



B-100



가 2 가 , 2 가 0.4 10 %
 , , 1.5 10 %가 , 0.01 20 %가 , 5 30 %가
 , 8 30 %가 .

, 2,6- -t- -p- ,
 - [3-(3,5- -t- -4-)], 2,6- -t- -p- [3-(3-t- -5-
 -4-)], 1,6- - [3-(3,5- -t- -4-)], 2,
 4- -(n-)-6-(4- -3,5- -t-)-1,3,5- , 2,2- - [3-(3,5-
 -t- -4-)], -3-(3,5- -t- -4-) , N,N'
 - (3,5- -t- -4-) , 1,3,5- -2,4,6- (3,5- -t- -4-
 -) , -(3,5- -t- -4-)- , 2,6- -t-
 -p- [3-(3,5- -t- -4-)],
 -t- -4- (3,5- -t- -4-)] , N,N'- [3-(3,5-
 (2,4- -t-))
 가 ,
 1ppm 1.0%가 , 10 1000ppm .
 ,
 ,
 가 , 370nm , 400nm
 가 , ,

109, 171, 326, 327, 328 가 가 가

0.01 5 %, 0.13 3 % 가 가

2 가 , 2 가

1 1.0 μ m 가 0.005 0.3 %가 2 0.0

가 , (가

), , 1 5 50nm , 7

16nm 0.01 1.0 μ m

AEROSIL() 200, 200V, 300, R972, R972V, R974, R202, R812, OX50, TT600 ,

AEROSIL 200V, R972, R972V, R974, R202, R812 . 2 . 2 AER

OSIL 200V R972V 0.1:99.9 99.9 0.1 , ,

가 , ,

가 ()

가 , 가

가 () , 가

2 가 ,

2 가 가 ,

1,3- , 1,4- , 2,2,2-

-1- , 1,3- -2- , 1,1,1,3,3,3- -2-

-2- , 1,1,1,3,3,3- -2- , 2,2,3,3,3- -1-

가 ,

1 40 % 1 4 가

1 4 , , n- , iso- , n- , sec- , tert-

15 40 %, 100 500 (P)

가 가 가 가 가

가 , 가

(TPP), , 가

-2-

가

가

1 8

(EPEG),

가

2

가

1 10 %가

가

[]

, , 1,3,5-) 가 (, 가 , ,
 ()

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. (Q)

가
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0.7

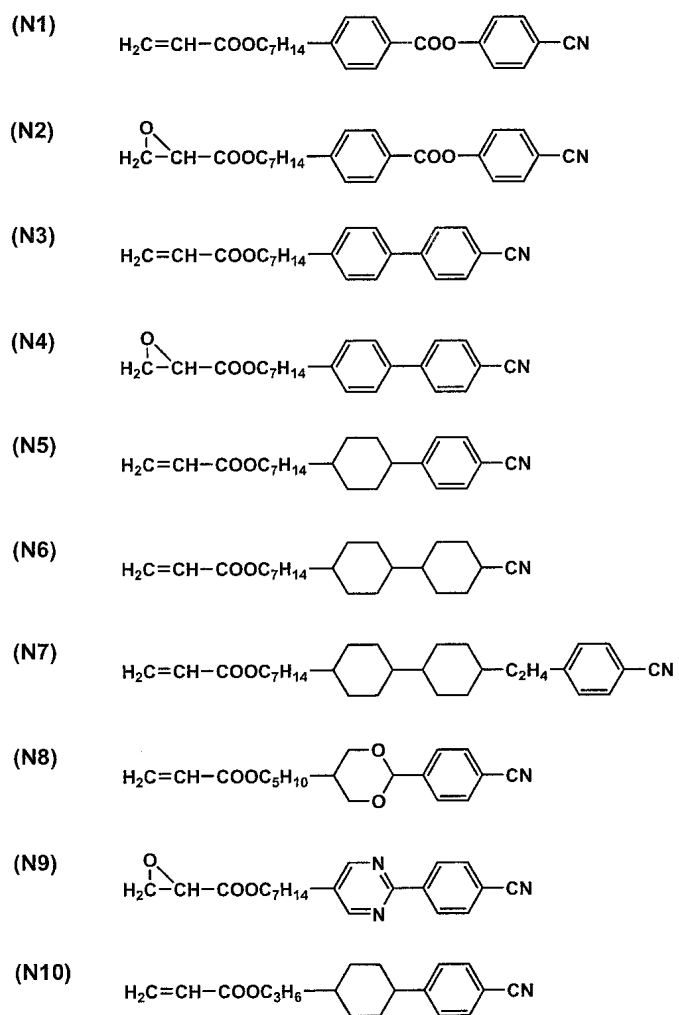
(Q) .

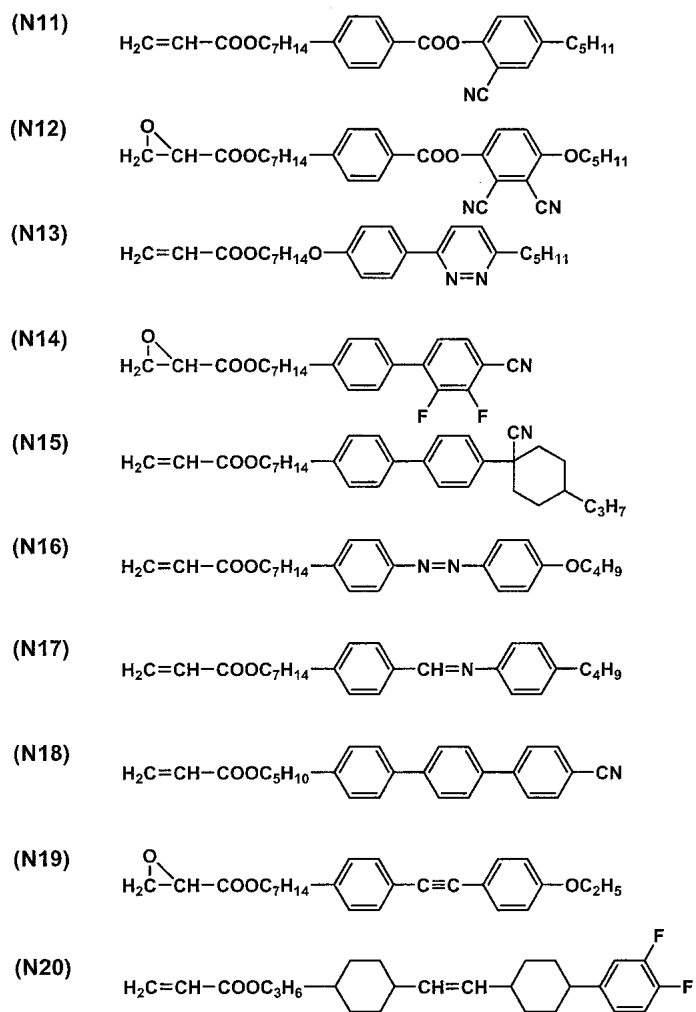
11 , 0.001

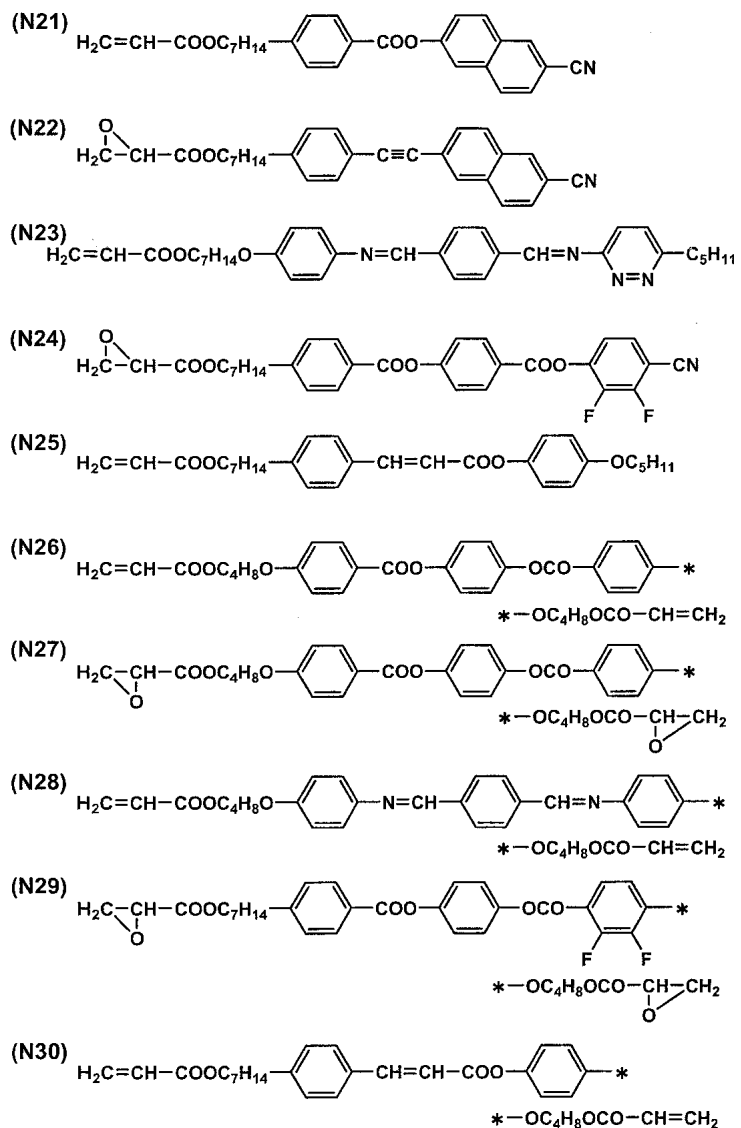
22 (1994) 4 , 7
142 3 .

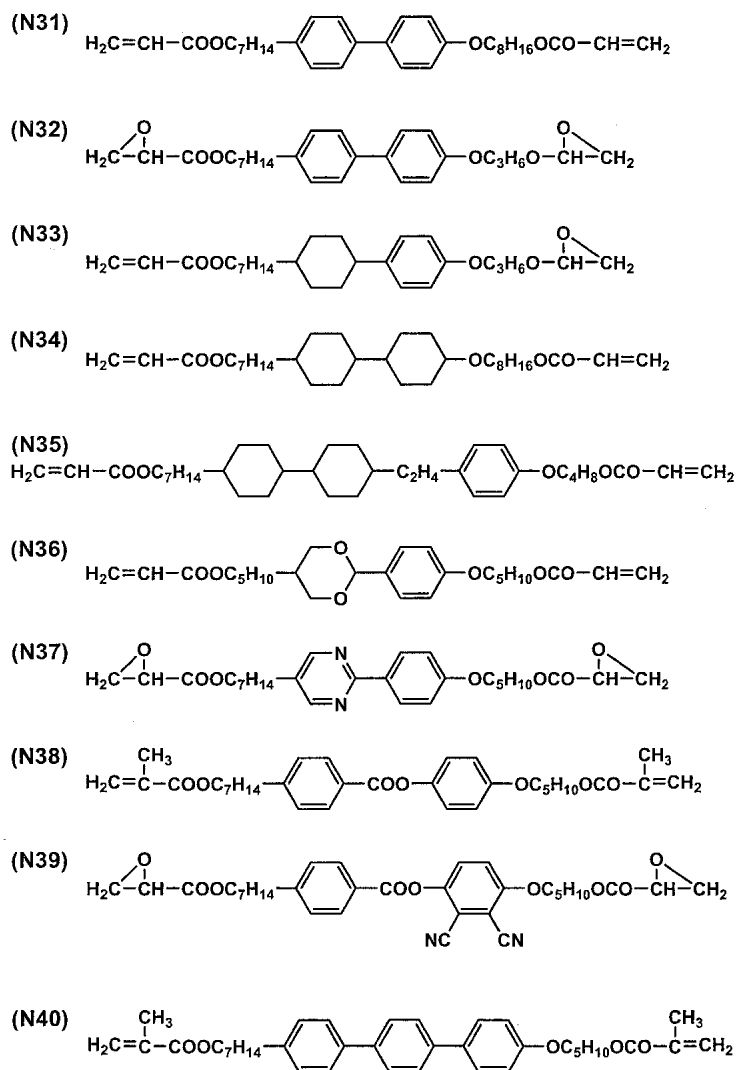
(Q1)	—CH=CH_2	(Q2)	—CH=CH—CH_3
(Q3)	$\text{—CH=CH—C}_2\text{H}_5$	(Q4)	$\text{—CH=CH—C}_3\text{H}_7(n)$
(Q5)	$\begin{array}{c} \text{—C=CH}_2 \\ \\ \text{CH}_3 \end{array}$	(Q6)	$\begin{array}{c} \text{—CH=C—CH}_3 \\ \\ \text{CH}_3 \end{array}$
(Q7)	$\text{—C}\equiv\text{CH}$	(Q8)	$\begin{array}{c} \text{O} \\ \\ \text{—CH—CH}_2 \end{array}$
(Q9)	$\begin{array}{c} \text{HN} \\ \\ \text{—CH—CH}_2 \end{array}$	(Q10)	—SH
(Q11)	—CHO	(Q12)	—OH
(Q13)	$\text{—CO}_2\text{H}$	(Q14)	—N=C=O
(Q15)	—NH_2	(Q16)	$\text{—SO}_3\text{H}$
(Q17)	—N=C=S		

(Q) , (Q1 Q7), (Q8) (Q9) ,
(Q1 Q6) 가 .
, 가 .

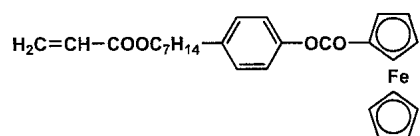




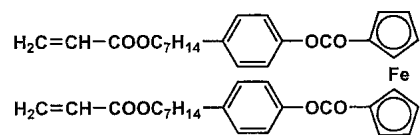




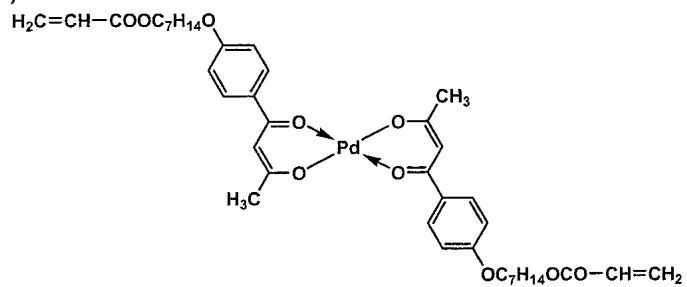
(N41)



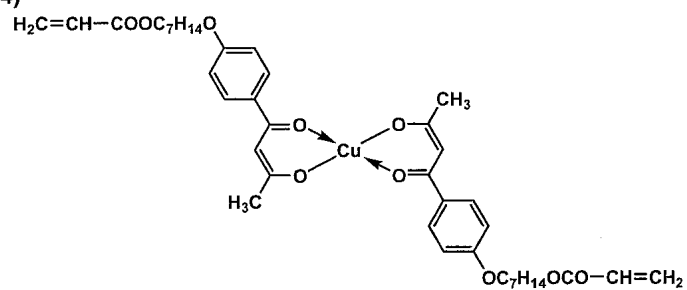
(N42)

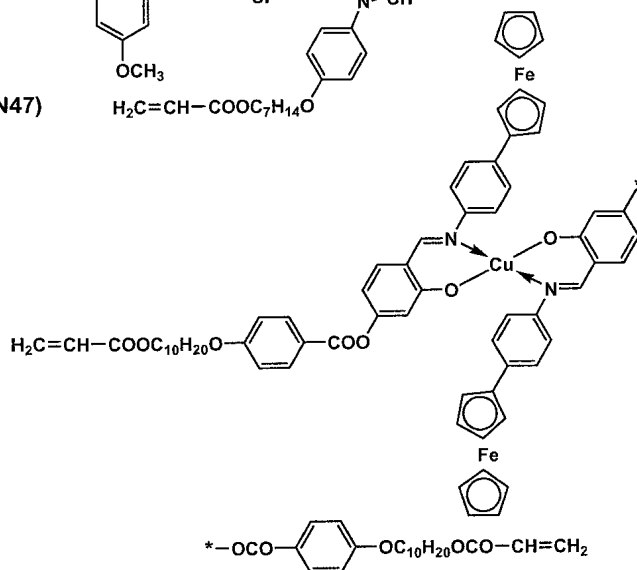
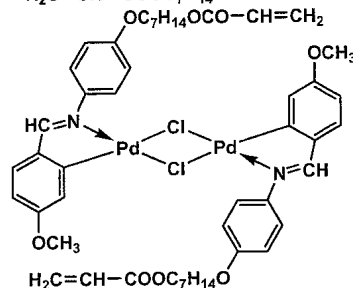
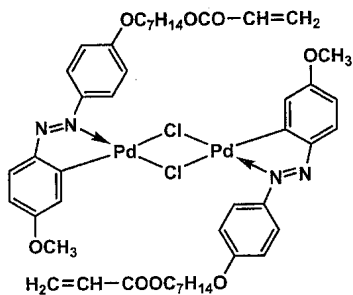


(N43)



(N44)





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96 , 70 (1984)
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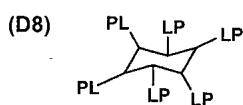
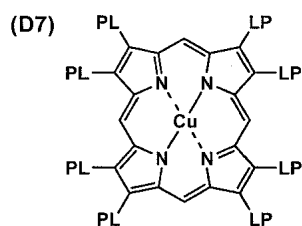
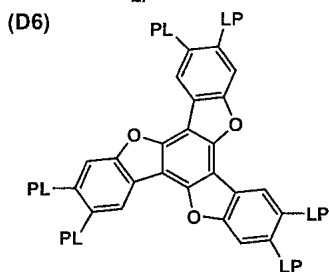
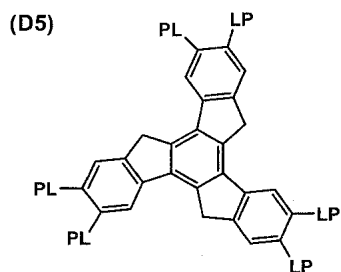
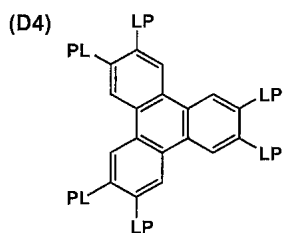
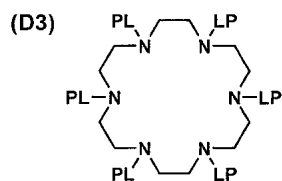
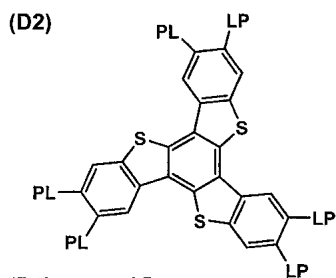
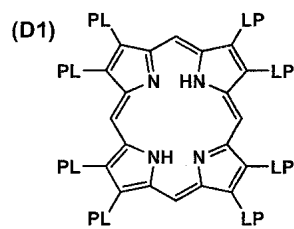
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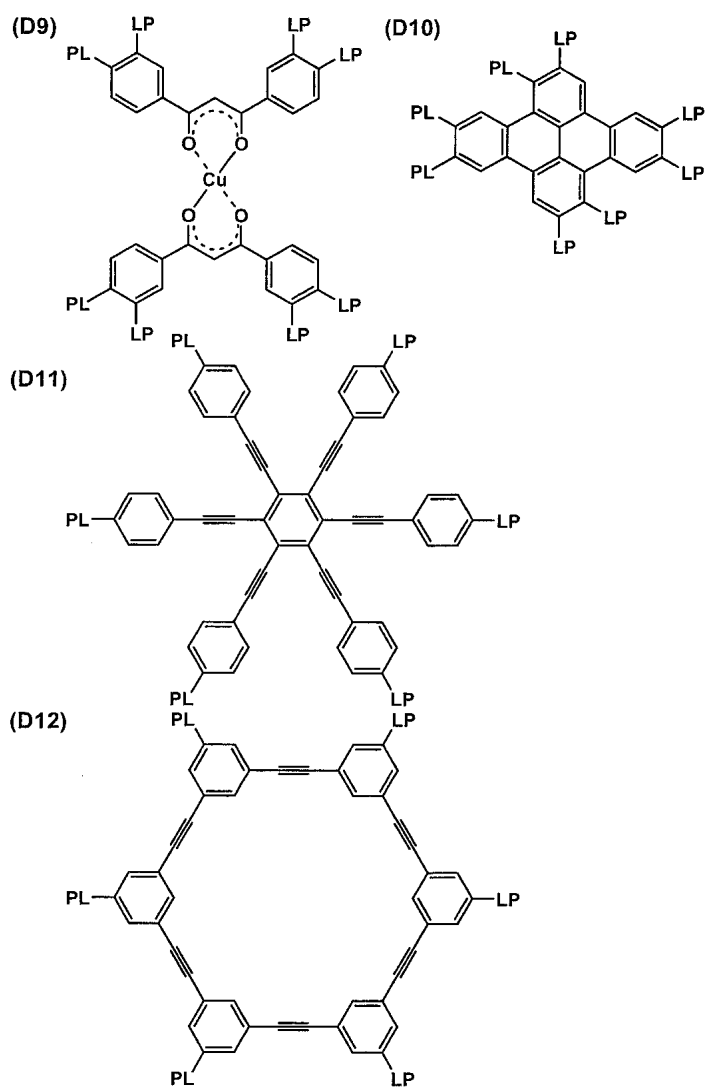
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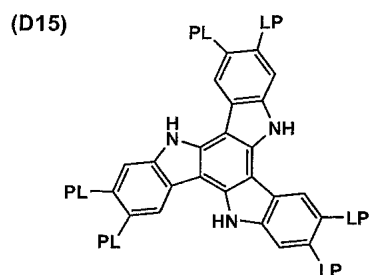
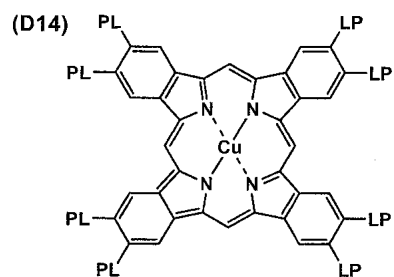
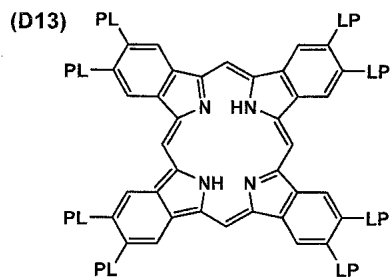
5

$$D(-L-P)_n^5$$

(D) , D ; L 2가 , P , n 4 12 (P) .
 , LP(PL) , 2가 (L)







, -CO-, -NH-, -O-, -S- 2가
 2가 (L) , 2가
 -O- 2가
 1 12
 6 10
 2가 (L) (D) (P) . AL
 , AR (,

L1: -AL-CO-O-AL-

L2: -AL-CO-O-AL-O-

L3: -AL-CO-O-AL-O-AL-

L4: -AL-CO-O-AL-O-CO-

L5: -CO-AR-O-AL-

L6: -CO-AR-O-AL-O-

L7: -CO-AR-O-AL-O-CO-

L8: -CO-NH-AL-

L9: -NH-AL-O-

L10: -NH-AL-O-CO-

L11:-O-AL-

L12:-O-AL-O-

L13:-O-AL-O-CO-

L14:-O-AL-O-CO-NH-AL-

L15:-O-AL-S-AL-

L16:-O-CO-AR-O-AL-CO-

L17:-O-CO-AR-O-AL-O-CO-

L18:-O-CO-AR-O-AL-O-AL-O-CO-

L19:-O-CO-AR-O-AL-O-AL-O-AL-O-CO-

L20:-S-AL-

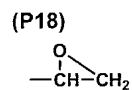
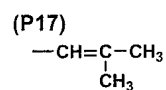
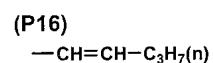
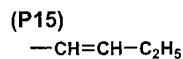
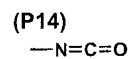
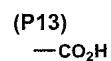
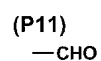
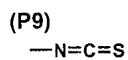
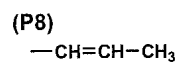
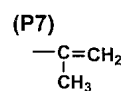
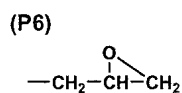
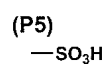
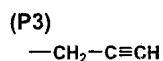
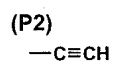
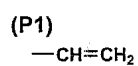
L21:-S-AL-O-

L22:-S-AL-O-CO-

L23:-S-AL-S-AL-

L24:-S-AR-AL-

5 (P) , (P)



(P) , (P1, P2, P3, P7, P8, P15, P16, P17) (P6, P18)
 (P1, P7, P8, P15, P16, P17) 가
 5 , n 4 12 , (D)
 L P ,

가,

[illegible]

(C(md), C(td))
가 (R) (d)
n(=R/d) n (KOBRA31PR,) , 23 , 55% RH
(R) ,
589nm md, td
C(md)Pa⁻¹ C(td)Pa⁻¹

()
10cm 23 , 50% RH 24
, 80 , 90% RH 50 23 , 50% RH 24

md, td S(md), S(td)

()
가 가 ELDIM EZ-contrast
가 =()/() 가
가 60 , 90% RH 500
10

가
:
:
x: 2 ° , 5 °
5 °

, , 가
1

(A)
1 AEROSIL R972 9 , 30MPa 가
, 9
14.2 1.2 0.7 (1 A)
, 3.0 가,
0.2MPa , 가 0.04 1.0
N0.244 A

[1]

	X	Y	X+Y	
A	1.9	0.75	2.65	40%
B	2.8	0	2.8	60%

()
(1 A) 100

TPP 8.5

EPEG 2

300
57
(B)
A (1 A) 60% B ,
A-7 100 6 가 A
B .
(C)
B , A-7 가 C .
()
A , 35 , 35 , 20 , 80
% . 40 . 1.3 ,
80 , 20% , 100N, 100 ,
500 , D .
(())
D , 60 2 / 2 ,
, 100 10 .
, 120 μ m 1 , 4 100
, 50 4 () .
, 5%
E . ,
, D , F() .
, G() .
D H , A B 가
F , A B
I() .
H I , M(), N() 가 .

, C K() 가 . J . J , 2 .

[2]

	R ₀	R _t	C(md)	C(td)	S(md)	S(td)
E	35	135	1.26×10 ⁻¹¹	1.40×10 ⁻¹¹	0.009	0.003
G	38	138	1.26×10 ⁻¹¹	1.38×10 ⁻¹¹	0.002	0.008
M	40	130	1.26×10 ⁻¹¹	1.31×10 ⁻¹¹	0.002	0.001
N	43	140	1.27×10 ⁻¹¹	1.30×10 ⁻¹¹	0.003	0.005
K	25	85	1.26×10 ⁻¹¹	1.38×10 ⁻¹¹	0.002	0.001

	C(md)× S(md)		C(td)× S(td)	
E	1.1×10 ⁻¹³	>	4.2×10 ⁻¹⁴	A
G	2.5×10 ⁻¹⁴	<	1.1×10 ⁻¹³	C
M	2.5×10 ⁻¹⁴	>	1.3×10 ⁻¹⁴	A
N	3.8×10 ⁻¹⁴	<	6.5×10 ⁻¹⁴	C
K	2.5×10 ⁻¹⁴	>	1.4×10 ⁻¹⁴	A

(md)<C(td) , E, M, K , | S(md) | > | S(td) | C , 가 가 .

, G, N , 가 가 .

2 K , 가 가 .

2

1 , 65 , E G () (0.1μm) ,

, LC-1 . 0.1% 450mJ/cm³ , E G , L O ,

L 가 , 1 가 . O × 가 .

(LC-1)

MEK() 88

1 3

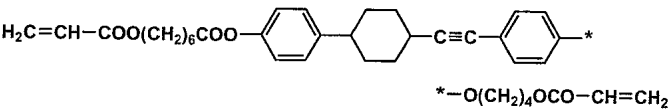
2 3

3 3

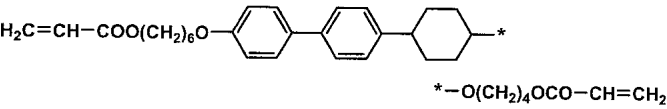
4 2

가 369(. .) 1

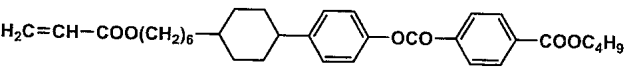
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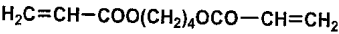
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3



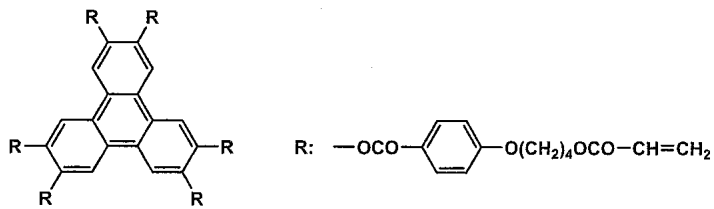
4



3

1 E, G, M, N (0.1μm)
, 65 , ()

41.01g, (V#360,
) 4.06g, (CAB551-0.2,) 0.90g,
(CAB531-1,) 0.23g, (가 907, 가
) 1.35g, (DETX,) 0.45g 102g



#3.6 130
2 가 , 60 120W/cm
, 1 UV
P, Q, R, S 2 가 D, F, H, I 가 P R 가 x
가가 가 , Q S
가

(57)

1.
(a) C(md), C(td)가 1×10^{-9} $1 \times 10^{-13} \text{ Pa}^{-1}$ C(md)<C
(td) ,
(b) 1 (R₀)가 20 70nm ,
(c) 2 (R_t)가 70 400nm ,
(d) 80 , 90% RH 50 S(md), S(td)
가 -1 1% | S(md) | > | S(td) |

[1]

$$R_0 = (n_x - n_y) \times d$$

[2]

$$R_t = \{ (n_x + n_y) / 2 - n_z \} \times d$$

, nx (遲相軸) () , ny (進相軸) ()
) , nz , d

2.

1 , 1

3.

1 2 , 가 4
5

[4]

2. $5.5 \leq X + Y \leq 2.85$

[5]

1. $4 \leq X \leq 2.85$

, X , Y () .

4.
1 3 , 가 59.0
61.5% , 100 2 가 0.1 20 .

5.
1 4 , .

6.
1 5 , .

7.
2 , 1 1 6 .

8.
7 .

专利名称(译)	光学补偿膜，视角补偿集成偏振器和液晶显示器		
公开(公告)号	KR1020040074610A	公开(公告)日	2004-08-25
申请号	KR1020040010270	申请日	2004-02-17
[标]申请(专利权)人(译)	柯尼卡株式会社		
申请(专利权)人(译)	柯尼卡美能达有限公司		
当前申请(专利权)人(译)	柯尼卡美能达有限公司		
[标]发明人	TASAKA KOJI 다사까고지 YAJIMA TAKATOSHI 야지마다까또시 KUZUHARA NORIYASU 구즈하라노리야스 UMEDA HIROKI 우메다히로끼		
发明人	다사까,고지 야지마,다까또시 구즈하라,노리야스 우메다,히로끼		
IPC分类号	G02F1/1335 C09K19/32 G02B5/30		
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代理人(译)	CHU，晟敏		
优先权	2003041030 2003-02-19 JP		
其他公开文献	KR100980534B1		
外部链接	Espacenet		

摘要(译)

本发明提供了一种光学补偿薄膜，光学补偿薄膜，视角补偿集成偏振器和液晶显示装置的支撑，用于增强液晶显示装置的视角补偿功能的耐久性。光学补偿薄膜的支撑体优选在纤维素薄膜的长度方向和宽度方向上具有 1×10^{-9} 至 1×10^{-13} Pa⁻¹的光弹性系数C (md)，C (td)和C (md) < C (td)，在80℃和90%RH各处方向处理50小时前后的尺寸变化率S (md)和S (td)为-1至1%下式(1)中的R₀为20~70nm，下述式(2)中的R_t为70~400nm。公式1 公式2 指数方面 光学各向异性层，芳香环，液晶化合物，保护膜，偏振器和视角补偿器集成偏振片

$$R_0 = (n_x - n_y) \times d$$