

(19)
(12)

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(B1)

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(11)
(24)

2003 01 24
10 - 0369076
2003 01 09

(21) 10 - 2001 - 0000667
(22) 2001 01 05

(65) 2002 - 0057569
(43) 2002 07 11

(73) 575

(72) 508

508

508

(74)

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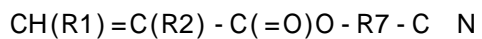
(54) 2

(a) 1 , 2
0.01 90 %; (b) 3 , 3
4 0.01 90 %; (c) 0.5
2.0 85 99 %
2 .

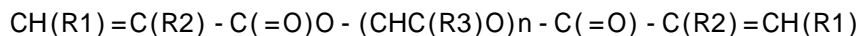
< 1

CH(R1)=C(R2) - C(=O)O - R5 - N(R4)(R5)

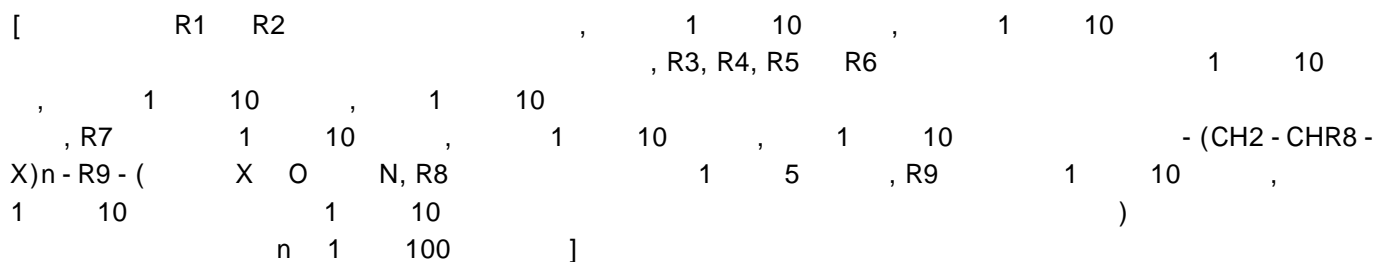
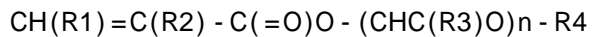
< 2



< 3



< 4



1

1

2

3 1 1

<

10, 21... 11, 22...

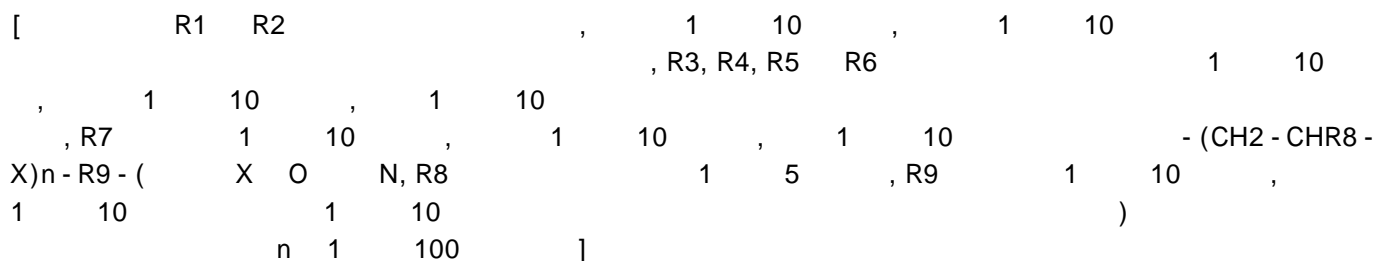
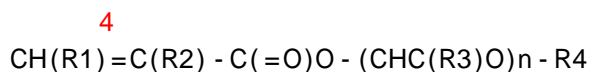
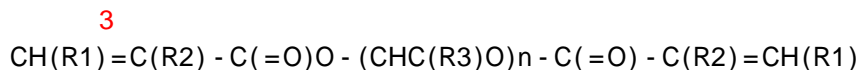
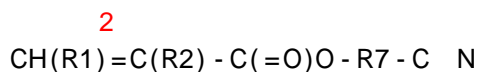
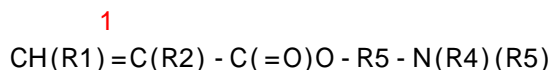
13, 13', 24, 24' ...

2

2

2 가 , 2
 1/2
 가 2 , 2
 , 2
 , 가 가
 가
 1
 1 , (11), (12) (13) (10) ,
 (10) (11)
 (12) (12') (10) (13, 13')
 2
 (21) , (12) , (21) ,
 (23, 23') (22) () (24, 24')
 1 가 (11, 22) 2 가 (10, 21) , (13, 13') (24, 24')
 가 가 가
 가 , ,
 5, 972,539 , 5,437,942 (5,972,539 , 5,279,910,
 , 5, 340,368). ,
 가 ,

- (a) 1, 2
0.01 90 %;
- (b) 3, 4
0.01 90 %;
- (c) 0.5 2.0 85 99 %



UV 200 400nm
UV
40 100
UV
가 UV 0.1
2 %

- (LiPF₆), (LiCF₃SO₃), (LiClO₄), (LiBF₄), (LiN(CF₃S
- O₂)₂)

가

(a) 가 ;

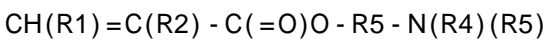
(b) 1
2
2

가
1
2 가

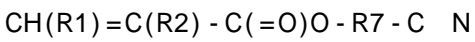
1 2 가

(a) 1 0.01 90 %; (b) 2 0.01 90 %; (c) 3 0.5 2.0
4 85 99 %

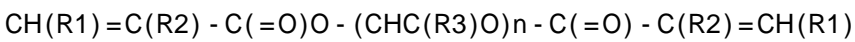
< 1



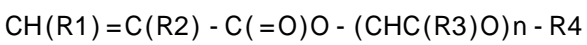
< 2



< 3



< 4



[R1 R2 , 1 10 , 1 10
, R3, R4, R5 R6 1 10

2

가 ,

, N -

2)

2

(1)

2

가

(

(2)

(1)

40 100

2

(PE)

(PP)

, PP/PE

, PP/PE/PP

PE/PP 가

/PP

가

1

N -

600Mø
LiCoO₂ 470g

15g

가

, 15g
5

가

2

320μm

가 147μm

4.9cm

N -

600Mø

(MCF) 449g

1g

50g

가

가

, 5

2

420μm

가 178μm

5.1cm

, 5.25cm

, 18μm

/ / 3

1g, 1.3M LiPF₆EC/DEC(EC DEC 1:1) 15g 3g, AIBN 0.06g
 75 3g 4 2

1

(EC DEC 1:1) 15g 4g, AIBN 0.06g 2g, 1.3M LiPF₆EC/DEC
 1 2

2

2.5g, 1g, 0.5g, 2g, 1.3M LiP
 F₆EC/DEC(EC DEC 1:1) 15g AIBN 0.06g
 1 2

3

06g 2g, 1.3M LiPF₆EC/DEC(EC DEC 1:1) 15g 3g, AIBN 0.
 1 2

4

EC/DEC(EC DEC 1:1) 15g 3g, AIBN 0.06g 3g, 1.3M LiPF₆
 1 2

5

1 1 85 1 가
 2 1

6

AIBN UV(max = 360nm) 10
 5 2

7

3 3 85 1 가
 2 1

8

AIBN UV(max = 360nm) 10
 5 2 .

2

, 1.15M 1M LiPF₆EC:DMC:DEC(3:3:4) (UBE) , 1
 2 .

10 1-8 1-2 2 85 4
 40kgf/cm² 가 .

가 , 1-8 2 1-2
 . 1-8 2 가

가

, 1 1 1 1C / 3
 , 1 가 100 가 1 .

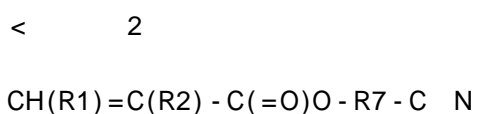
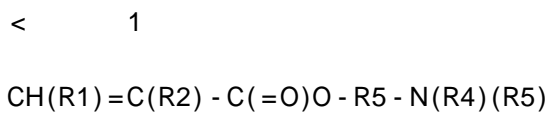
가

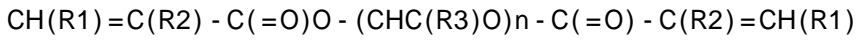
2 .

가 가

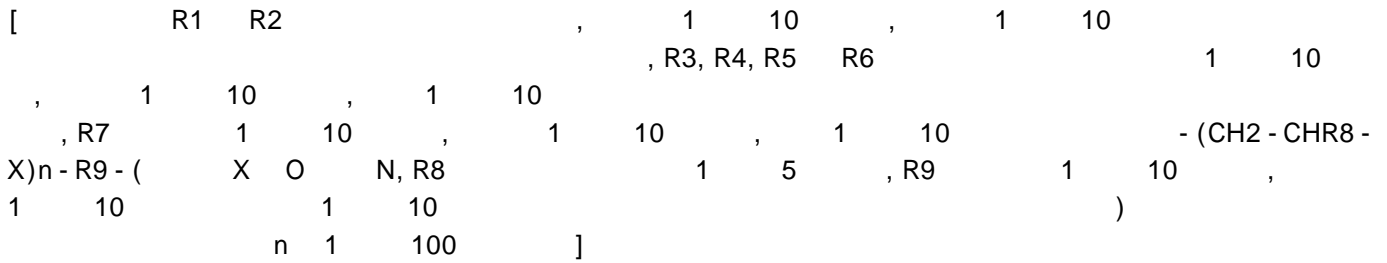
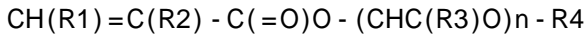
(57)

- 1.
- (a) 1 , 2
 0.01 90 %;
- (b) 3 , 3 4
 0.01 99 %;
- (c) 0.5 2.0 85 99 %





< 4



2.

1, 0.1 2 %

3.

1, UV

4.

3, 가 40 100 .

5.

3, UV 200 400nm .

6.

1, (LiCF₃SO₃) (LiClO₄), (LiBF₄), (LiPF₆), (LiN(CF₃SO₂)₂) .

7.

1, 가 , , , - , , , .

8.

(a) 가 ;

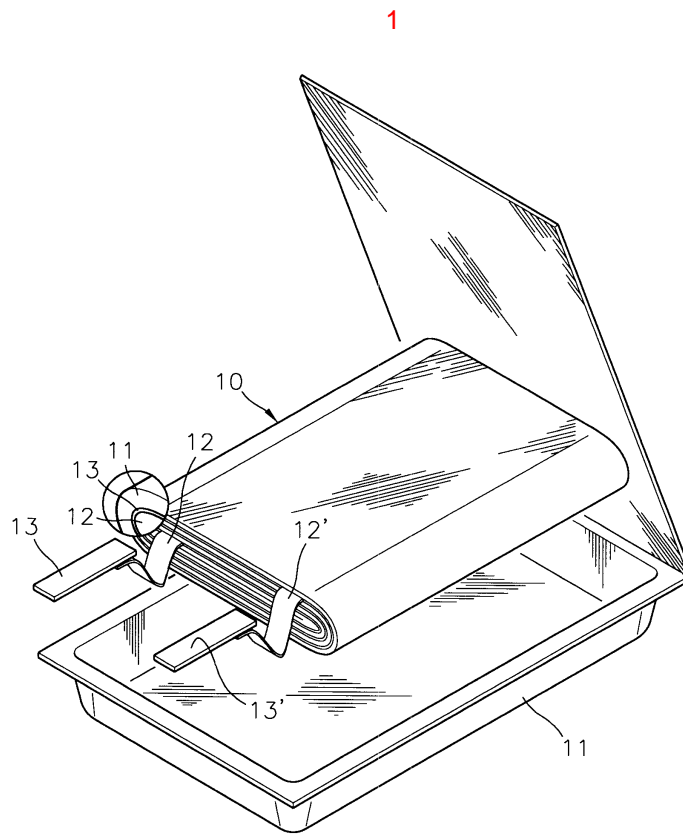
(b) 1
2 .

9.

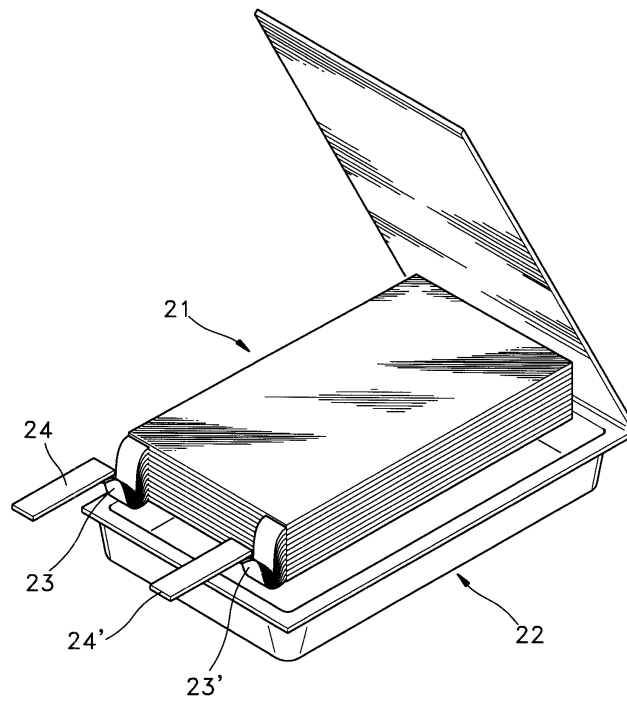
8 ,
2 .

10.

가 , 가
1
2 .



2



3

