

(54)

(, Mg, Ti, , 1 12)
, R ,)

CH₂=CHR

12) , CH₂=CHR (, R , Ti, Mg, , 1
() , ,

가

EP-A-45977

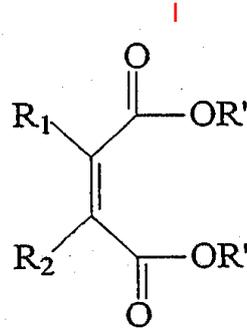
1 20 2- 2- 2- 5,436,213 2-

58(1983)-138708

, 가 , , 가 1 4 , 가
가 ,

/

H₂=CHR (, Mg, Ti, , I , R , 1 12) C



[, R' 1 20 , R₂ 가 , R₁ 1 20 , R₁ 1 20] .
R₂ 가 , R₁ 1 5 10 1 , 가 . R₁ R₂ 가
R' 8 1 2 10 1 , 가 , R' , n- , n- , , 2-
, -n- 2- , (2-) 2- , 2-n-
n- 2- 2-n- , 2- 2-n- , 2-
, 2- , 2- , 2- , 2-n-
, 2- (2-) 2- , 2-(1,3-) 2-(2-)
-(-) 2- , 2-(3,3,3-) , 2-(3-) 2
, 2-(2,2,2- - 1-) , 2,3- , 2,3- (2,3- -n- , 2,3- -n- ,
2,3- , 2,3- , -n- 2,3- ,
2,3- -n- , 2,3- -n- , 2,3- ,
2,3- , 2,3- , 2,3- , 2,3- , 2,3-
, 2,3- (2-) , 2,3- (1,3-)
, 2,3- (3-) , 2,3- (-) , 2,3- (3,3,3-
) , 2,3- (3- -) , 2,3- (2,2,2- -1-
) 2- -3- , 2- -3- -n- , -n-
2- -3- , 2-n- -3- , 2-n- -3-n- ,
2- -3- 가 , 2- -3- , -n- 2-

, Ti, Mg

, Ti- Mg MgCl₂ 가
 . 4,298,718 4,495,338 -
 . 가, 가 X- 가
 n TiCl₄, TiCl₃ Ti(OR)_{n-y}X_y(, n Ti- 가 , X , y 1) Ti-
 가 가 (milling)
 80 135 TiCl₄ ,
 (co-milling) 가 1 4 1,2- 40 ,
 , 80 135
 , TiCl₄ TiCl₄ . TiCl₄ ,
 가) 80 120 (4,220,554 TiCl₄
 , Ti(OR)_{n-y}X_y(, n 가 , y 1 n)
 , R 1 TiCl₄ 18 MgCl₂ · pROH (, p 가 0.1 , y 6, 2 3.5)
 , 가 가 (100 - 130)
 , 가 가 (quenching) 가 4,399,054 4,469,648
 (80 - 130) 가 3 , 0.1 2.5 가
 Ti 가 () TiCl₄ (0)
 TiCl₄ ; 80 130 가 , 0.5 2 .
 553806 , EP-A-601525 , PCT EP-A-395083 , EP-A-553805 , EP-A-
 WO98/44009
 (B.E.T.) , 0.2 m³/g 20 500 m²/g, 50 400 m²/g
) 10.000 , (Hg) 0.6 m³/g 0.3 (B.E.T.
 0.45 1 cm³/g . 0.3 1.5 cm³/g,
) TiCl₄ 가 , 80 130 (,
 가 TiCl₄ ,
 가 가
 , 가 , , ,
 MgCl₂

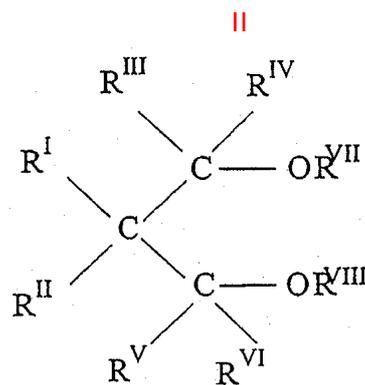
0.01 1, 0.05 0.5 .



- (a) ;
- (b) , ,
- (c) () .

-Al (b) , , -n- ,
 -n- AlEt₂Cl Al₂Et₃Cl₃ ,

(c) I , , 2,2,6,6-
 4- , ,
 II 1,3- :



[, R^I, R^{II}, R^{III}, R^{IV}, R^V, R^{VI} , , R^{VII}, R^{VIII} ,
 ; R^I R^{VIII} 1,3- 가 .] . R^{VII} R^{VIII} R^I R^{VI} 1 18
 1 4

, c 1 3 , (a+b+c) 4 R^a R^b R^c Si(OR⁷)_c (, a b 0 2
 18 ,) , a 1, b 1, c 2 , R⁵
 R⁶ 3 10 ,
 , R⁷ 1 10 ,
 , , -t-
 , 2- , 2-t- , 1,1,1- -2-
 , 가, a 0, c 3 , R⁶
 , R⁷
 , t- t-

(c) , (c) 가 0.1 500,
 1 300, 3 100 ,

() , (X.I.
) , , /

CH₂=CHR (, R 1 12
 가 .

() 가,

20 120 , 40 80
 , 0.5 10 MPa, 1 5 MPa .
 1 6 MPa, 1.5 4 MPa 가

I (I)

2-

THF 500 mL (I) - (20.4 g, 99.0 mmol) -40
 M 가 . -40 THF (49.5 mL, 99.0 mmol) i- 2.0
 THF 160 mL 가 (13.2 mL, 82.5 mmol) -78 가
 가 , -78 1 NH₄Cl
 가 30 .
 NH₄Cl , Na₂SO₄
 2-i- 14.8 g (79 %, 74-75 /
 1 mmHg)

70 4 L , AlEt₃ 800 mg
 75 ml, 79.8 mg 10 mg 30 .
 1.5 Ni 가 , 1.2 Kg 5
 70 , 70 , o- 25
 (X.I.)

X.I.

2.5 g 135 30 o- 25 ml , 25
 , 30 가 , (%)

1 - 5 1 - 3

0 TiCl₄ 250 ml 500 ml
 MgCl₂ · 2.8C₂H₅OH (10,000 3,000 rpm
 9,054 가 100 120) 10.0 g, Mg 6 4,39
 TiCl₄ 250 ml 가 120 60
 60 (6 × 100 ml)
 1 Ti (%) (%)
 2

[1]

		%	Ti %
1	2-	8	3.2
2	2-n-	10	2.8
3	2-	8.7	3.4
4	2-n-	6	3.7
5	2-	7.5	3.8
1		10.4	5.4
2	2-	8.7	2.6
3	-	9.4	3.5

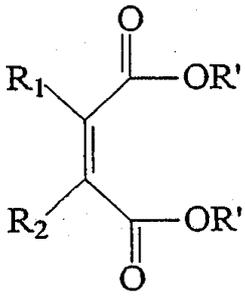
[2]

	(Kg/g)	I.I. (%)
1	45	97.2
2	41	97.2
3	54	97.4
4	43	97
5	38	96.5
1	16	93.9
2	26	96.6
3	26	96.4

(57)

1.
 Mg, Ti, R , 1 12) : CH₂=CHR (,

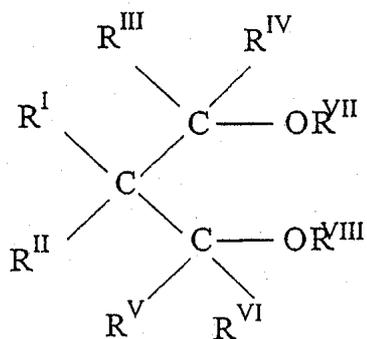
[1]



- [1, R', 1, 20, R₁, 1, 20, R₂가, R₁, 5, 20, R₁, 1, 20, R₂가]
2. 1, R₂가 H, R₁, 5, 10, ,
 3. 1, R₁, R₂가, 1, 10, .
 4. 1, R' 가, 2, 10, ,
 5. 1, , Ti-
 6. 5, , TiCl₄, TiCl₃, .
 7. 1, 6, (B.E.T. ,) , 20, 500 m²/g, (B.E.T.) 0.2, cm³/g
 8. (a) 1, 7, ;
 (b) , ,
 (c) ().
 9. 8, (b) 가, .
 10. 9, -n-, , -n-, , -n-, , -n-
 - 11.

8 , (c) II 1,3- :

[II]



[R^I, R^{II}, R^{III}, R^{IV}, R^V, R^{VI}, R^{VII}, R^{VIII}, R^I, R^{VI}]

12.

8 , (c) 가 R^a R^b Si(OR⁷)_c (, a b 0 2 , c
1 4 , (a+b+c) 4 , R⁵, R⁶ R⁷ 1
18 ,)

13.

12 , a 1, b 1, c 2 .

14.

13 , R⁵ / R⁶ 가 3 10 ,
, R⁷ 1 10 ,

15.

12 , a 0, c 3 , R⁶ , R⁷

16.

13 15 , , -t- , -t- ,
2- , -2-t- , 1,1,1- , -2- , -

17.

8 16
1 12) () . CH₂=CHR (, R

18.

I .