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1997 02 19

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(73) , 19807, , 238, 4001 ,

(72) - , 19382, , 1210

, 25313, , 27

, 25326, , 100 ,

(74)

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(54)

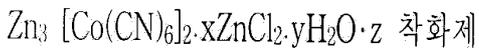
DMC (DOUBLE METAL CYANIDE) DMC ,
DMC 1 0.2 ,
(DOUBLE METAL CYANIDE ; DMC) .
100 % ,

가 .

1 100 ppm
(propylene oxide ; PO)
2 5 X

(DOUBLE METAL CYANIDE ; DMC)

(DMC)
(KOH)
DMC 가 DMC
가
DMC ()
DMC t -
DMC (EP-A-0654302).



DMC , US
3,427,256 , 3,278,457 3,941,849 . 가 US 5,158,922 DMC
가 ,
US 5,158,922

100 %
1 3 가
0.6 US 5,158,922 DMC 1 0.2
()
US 5,158,922 ()
가 , t - 가 . t -
KOH ,

105 2 g 가 100 ppm 가
DMC (EP-A-0654302). t -

EP- A-0654302 1 0.5 1 0.2 X
(5),

EP- A-0654302 100 ppm 3 g
PO 가 가 가 가
가 가 가 가

DMC ,

DMC DMC 가 1 0.2 , 0.5

X- (2 3). ,

(4), X

A - 0654302). DMC DMC (5 EP -

100 ppm (가) 3 g .105 PO

가 , 105 100 ppm () 3 g

(d - spacing),) 6.1, 5.9, 5.1, 4.2, 3.8, 3.6, 2.5 1 0.07 - 0.18 2.3 (d- 2 3

X

가

0.004 meq/g

- A - 0654302 DMC 1995 5 15 08/435,116 EP

(2) 가) 가), DMC : (1)

(가) 가),

DMC

(3 3).

(DMC 1 0.5 DMC 1 0.2 100 %

(1 - 2 2).

가

DMC 1 0.2 DMC

DMC 1 0.2 , , 1 g , (,

가 가 X 가 .

가 .

가 .

DMC 가
 DMC (US 3,278,457 3,404,109
 (US 5,145,883 3,538,043
)) , US 5,22
 3,583 , 5,145,883 , 4,472,560 , 3,941,849 , 3,900,518 , 3,538,043 , 3,404,109
 , 3,278,458 , 3,278,457 J.L.Schuchardt S.D.Harper SPI Proceeding, 32nd Annual Polyuret
hane Tech./Market. Conf. (1989) 360 . DMC
 US
 DMC DMC 가 ,
 가 DMC
 25 ppm
 0.006 meq/g , 0.007 meq/g
 DMC 0.005 meq/g
 2 - 6, 가 2 - 3 , 가 2 - 8,
 1000 - 12000 , 가 2000 - 8000 500 - 50,000
 []
 $Zn_3 [Co(CN)_6]_2$ 1 0.2 $ZnCl_2$ /t -
 306 % 1 0.2 ,
 (15 ml) 2 (4 g) (75 ml) 3 t - (50 ml) (150 ml) (10 g)
 1 가 3 , 가 , 20 (2)
 50 ml) (50 ml) 40 psi 5 t - ()
 t - (70 ml) 20 (30 ml)
 , 50 - 60 , 30 in (Hg) , 20
 pm 가 11.1 g) . (4 105 100 p
 $ZnCl_2$) . X 1.4 % $Zn_3 [Co(CN)_6]_2$ 0.14
 d- ,) 6.1, 5.9, 5.1, 4.2, 3.8, 3.6, 2.5 2.3 ((2) .
 30 mg KOU/g (5) 0.0043 meq/g
 $Zn_3 [Co(CN)_6]_2$ 1 0.2 $ZnCl_2$ /t -
 , 306 % 가 , 1 0.2
 가 , 30 가 , 1
 , 1.2 1
 t - t - / 50 : 50 2 .

10 g
 pm 가).
 ZnCl₂)가
 [d- (d - spacing),]
 meq/g 가 31.1 mg KOH/g
 Zn₃[Co(CN)₆]₂ 1 0.2 ZnCl₂
 63 % DMC /t -
 0 g), t - (95 g) (445 g) 가 1 (5.
 1 가 25 가 (5 g) (5 g)
 - (68 g) (38 g) 30 psig 가 70 : 30 t
 - (99.5 % ; 98 g , 125 ml) , 30 t
 30 45 , 30 in (Hg) 18
) 10.9 g (4 105 Zn₃[Co(CN)₆]₂ 100 ppm
 7 ZnCl₂) 0.7 % (3) 6.1, 5.9, 5.1, 4.2,
 3.8, 3.6, 3.1, 2.5, 2.3 2.1 [d - spacing,] 가
 4
 1 : -----
 0.057 g, (700), (70 g) (105
 가 100 ppm) 가 30 in(H
 g) 가 가 가,
 가 (accelerated pressure) 가 가 가,
 10 psig 가 (490 g) 가 105
 PO 가 (g) () (1). PO (g)
 가 가 ()
 100 ppm 10 g PO (1 105).
 , US 5,158,922 105 100 ppm
 2 g PO
 5
 2 (700), (685 g) (1.
 63 g) 105 가
 30 in (Hg) 가 (102 g)
 가 가 가 (accelerated pressure)
 가 가 가
 가 40 psi 가 (5713 g) 가
 가 40 psi 2 2 가
 105 가
 (0.45 - 1.2)
 100

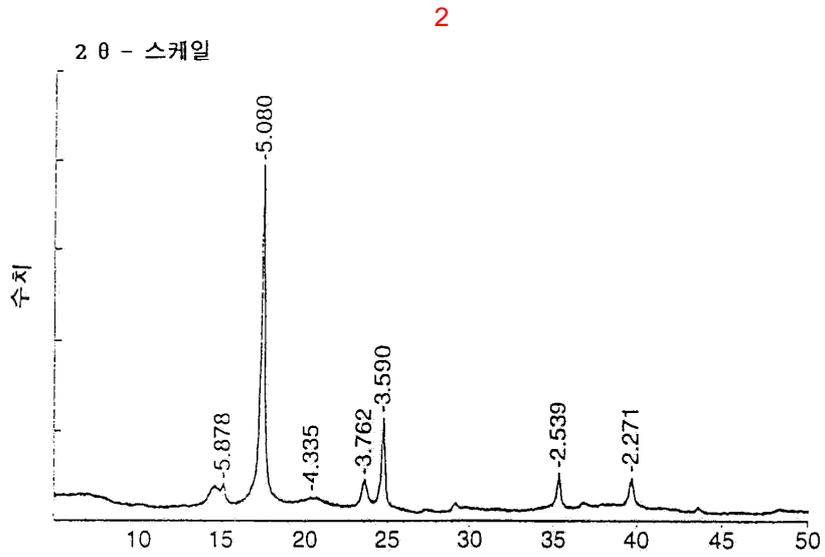
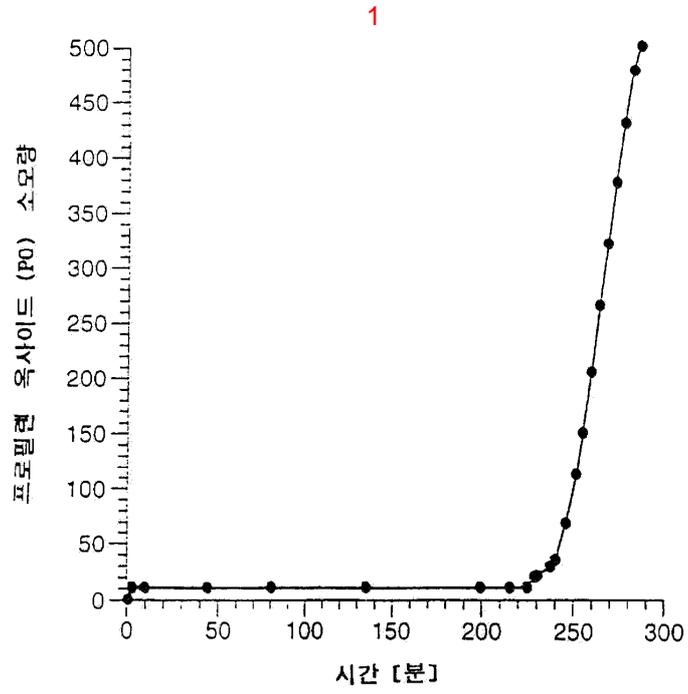
DMC 가 DMC	DMC	가	DMC	DMC
		25 ppm		
		0.006 meq/g	0.007 meq/g	0.005 meq/g
2 - 6, 가	2 - 3 1000 - 12000 , 가	가	2 - 8, 500 - 50,000	
(57)				
1.	(DOUBLE METAL CYANIDE ; DMC)	DMC	1 0.1 DMC	
가				
2.	DMC			
1				
DMC				
3.		가 t -	DMC	
1	2			
4.		X	6.1, 5.9, 5.1, 4.2, 3.8, 3.6, 2.5	
1	2		DMC	
2.3 (d - spacing ,)				
5.		2 DMC X		X
1	2			
6.			100 ppm DMC	105
1	2			
3 g				
7.		가 0.005 meq/g		
1	2			
DMC				
8.				1
DMC				
100 %			가	DMC 1
0.1				
9.				
(a)				
(b)		DMC 1 0.1 ;		
10.	1	DMC		
8	9	DMC 가		DMC
11.		가 t -	DMC	
8	9			
12.		X	6.1, 5.9, 5.1, 4.2, 3.8, 3.6, 2.5	
8	9		DMC	
2.3 (d - spacing ,)				
13.				

1

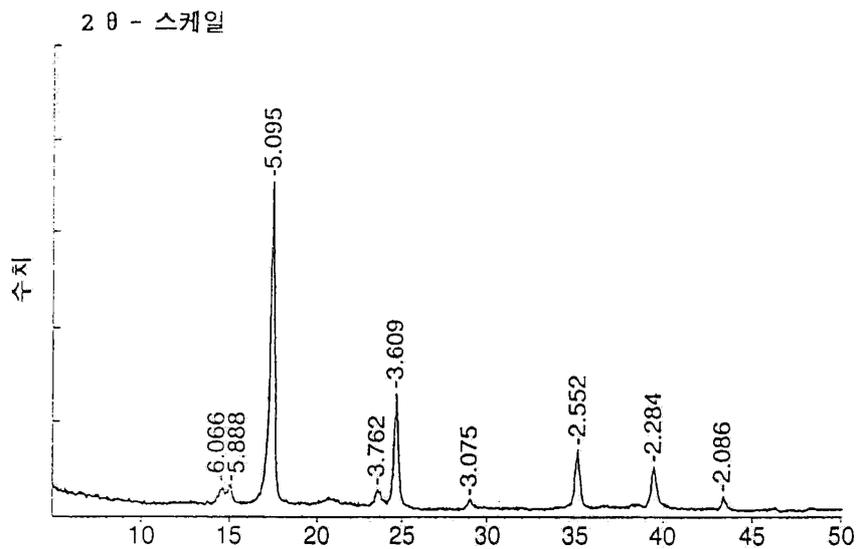
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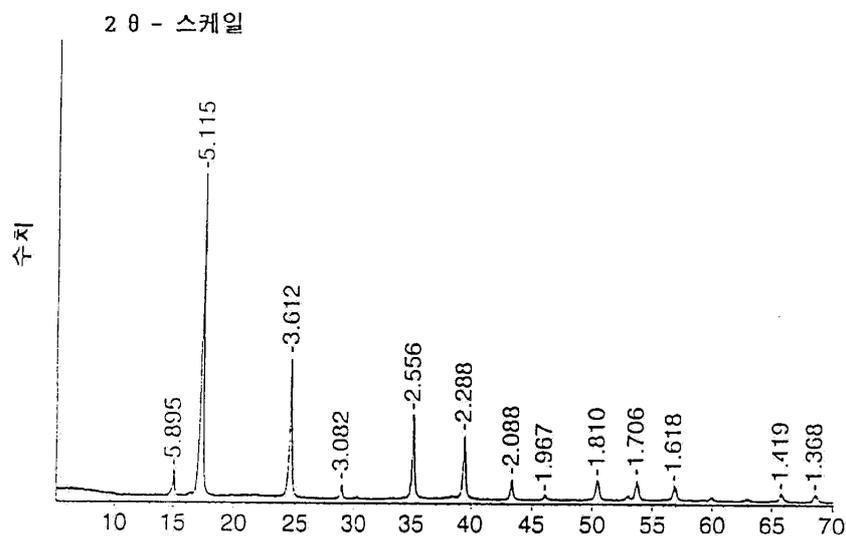
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3



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