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(21) 10 - 2000 - 0043011  
(22) 2000 07 26

(71) 3 416

(72) 1101 - 19201

(74) :

(54) 2

TM

2

2

, 2- ,

1



(Path) . , (Reference Level) TR 2  
 가

2

2 , Tr\_3 FET(Field Effect Transistor) FETTr\_3  
 211 , VDD 213 ,  
 Tr\_5 211 Tr\_3 Tr\_3  
 , Tr\_1 213 Tr\_3 , 1  
 . 2 Tr\_2 211 , Vp  
 Tr\_4 108 Vp , 3  
 Vp 213 , Tr\_5 111 Tr\_3  
 , V\_cont .

Vp 가 1 가 1 ,  
 Vp가 1 가 2 V\_cont  
 Vp가 2 ,

2 (Reference Level) 가  
 (Tr\_2,Tr\_4 : ON, Tr\_1 : OFF, V\_cont : 0.7V ) ,  
 (Tr\_2,Tr\_4 : OFF, Tr\_1 : ON, V\_cont : 0.7V )

2 RF 4 FET Tr\_1, Tr\_2, Tr\_3, Tr\_4 1 BJ  
 T(Bi - Junction Transistor) Tr\_5 , MSM 2 GPIO PIN V\_cont Vp  
 . 2 Tr\_1, Tr\_2, Tr\_4 , Tr\_3  
 , Tr\_5 V\_cont  
 Tr\_5 Ib Tr\_3 Id ICP1 Vp  
 Tr\_1, Tr\_2, Tr\_4 / (ON/OFF) Vp  
 가 3V( 1 ) , 0V ( 2 )가  
 Vp가 0V V\_cont 0.7V 3V , Vp가  
 3V V\_cont 0.7V 0V .  
 (V\_cont) (Matching N/W)211 213 , Tr\_5  
 RC (RC - FILTER)가 .

V Vp 0V가 , V\_cont 0.7V 3V . 0.7V 3  
 V\_cont Tr\_5가 , Tr\_1 0V  
 Vp Tr\_2 Tr\_4 Tr\_2 Tr\_4 Tr\_3 가 Vgs가 0V가  
 . Tr\_2 Tr\_4 가 Tr\_3 가 .

V\_cont 0.7V , Tr\_5 Ib 가 V  
 \_cont Tr\_5 Ic가 Tr\_5 Tr\_3 Tr\_3 V  
 -cont (sweeping) Tr\_3 Tr\_3 Tr\_3

< 1 >

[ 1 ]

|             |   |
|-------------|---|
| (Condition) | Vp : 0V Tr_2 Tr_4 Vgs 0V Tr_5 ON Tr_3 ON Tr_2,Tr_4 : ON<br>Tr_1 : OFF                           |
|             | V_cont 0.7V Continuous Sweep Tr_5 Ib Tr_5<br>Ic Tr_3 Drain Current Tr_3 ICP1 Current S<br>aving |

Vp 3V가 , V\_cont 0V 0.7V 0.7V  
 V\_cont Tr\_5 Tr\_3 Tr\_1 3V Vp  
 Tr\_2 Tr\_4 Tr\_3 Tr\_2 Tr\_4 Vgs가 3V가  
 가 가 Tr\_3 Tr\_1

< 2 >

[ 2 ]

|             |   |
|-------------|---|
| (Condition) | Vp : 3V Tr_2 Tr_4 Vgs -3V Tr_5 OFF Tr_3 OFF Tr_2,Tr_4 : OFF Tr_1 : ON |
|             | Main Signal Tr_3 Direct   |

2 2 , V  
 \_cont IIP3 3  
 0 mA 15.5 dB Gain 가 , V\_cont > 0.7 V 가 가 IIP3  
 Gain -0.6 dB , V\_cont < 0.7 V

가  
가

(57)

1.

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, 가  
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2.

1 , 가,  
1 1 2 가 3 , 2  
1 가 1 2 가 3 ,

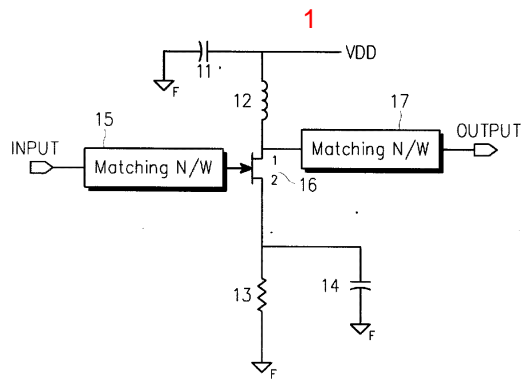
3.

1 2 ,  
가

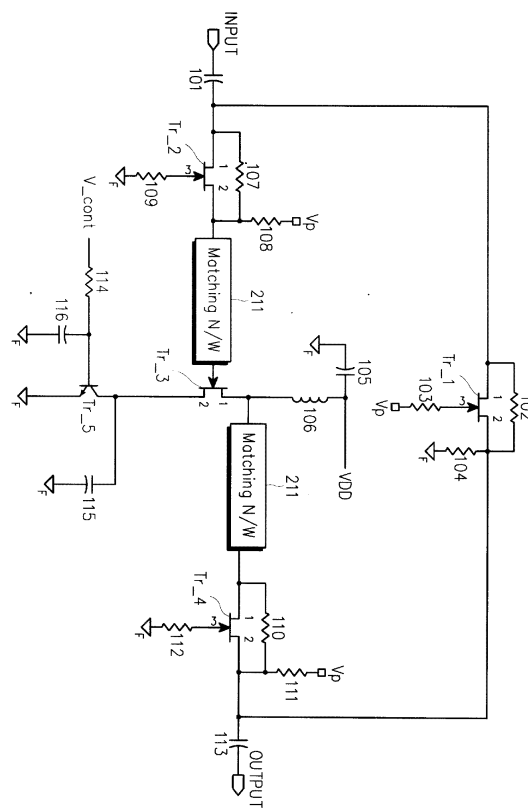
4.

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2 , 가 1  
1 2 1 , 2  
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1 , 1

2 ,  
 2  
 3 ,  
 1 2



2



3

