

(19)  
(12)

(KR)  
(B1)

(51) 。 Int. Cl.<sup>7</sup>  
H04B 3/54

(45)  
(11)  
(24)

2004 08 30  
10-0446188  
2004 08 19

(21) 10-2002-0005892  
(22) 2002 02 01

(65)  
(43)

10-2003-0065854  
2003 08 09

(73) 44 1-105

(72) 44 1-105

(74)  
:

(54)

120BPS

가 가  
가

, 가  
,  
(Zero Cross)

3a

1a  
1b 1 3  
1c PLC(Power Line Communication)MODEM 2  
2a 2b  
3a  
3b 가  
4a  
4b 4a  
5a  
5b 5a  
6 가

7  
\*  
10  
11  
12  
20  
21  
22  
23  
24  
30  
30a  
31  
40,41

\*

120BPS 가가 ,가  
가 (Zero Cross)  
(101) (102)( ) (10  
(103) (102) (104) (101)  
1a , (101) 가  
, PWM(Pulse Wave Modulation) , (1  
(102) , (1  
05) 2 (103) (1  
1b (203) (205) 1 3 . PMW 가 (1  
(205) 1  
1c (203) 1 PLC(Power Line Communication)MODEM 2 (305) (30  
6) 가가 가 가 가  
2a 가가 2b . 100% (0 ) 100% , 50%  
(90 )  
가 50% 100% 가 ,  
가 가가 ( )  
50%  
가

, 가 120BPS 가 가 가 (Zero Cross)

( ) ( )

가 3a (10) ( , Dimming Up/Down ) ( )

3a ( ) ( ) (TRIAC)(30)

( ) (20) 가 ( ) (20)

가 가 (10) 4a (11)

(Signal Generator) (12), (40) (30)

(11) (Zero Cross) (12) 가

(12) ( , On/Off, Dimming Up/Down, Compressor On/Off ) 4b (4)

(30) (Gate) 가 (Td) (30) 가 (On)

'1' '0' (Td) 0 ( ) (30)

4b (5) 5a (21), (22), (23), (24)

(20) 5b (4) (10)

(21) 가 (OP Amp)

(23) 가 (Offset) 5b (2) 가

6 가 (2) (a)가

(30)

6 (3)

가 가

(24) (40) 가 3b (10a)

(20a) (20a) (10a)가 가 (31) (30)

a) 가 가

(Slave) 가 (Master)

(Manchester Code) 가 On/Off 가

가 가 (1) (5) (Format)

가 가

가 3 (Packet) 7 (1)  
 가 8가 7 (2) 가가  
 가  
 120BPS , 0 가 , 가 , (EMI),  
 가 가 가 , 가 가 가 ,  
 가 .

(57)

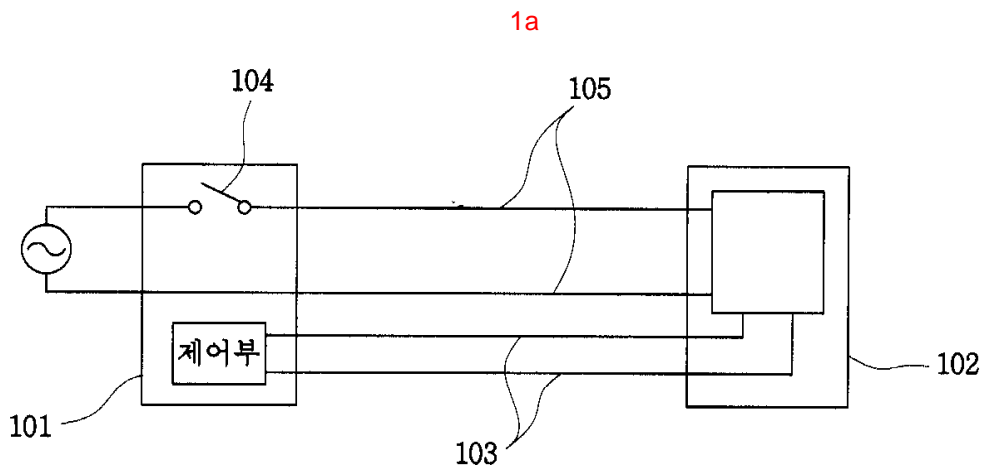
1.

2.

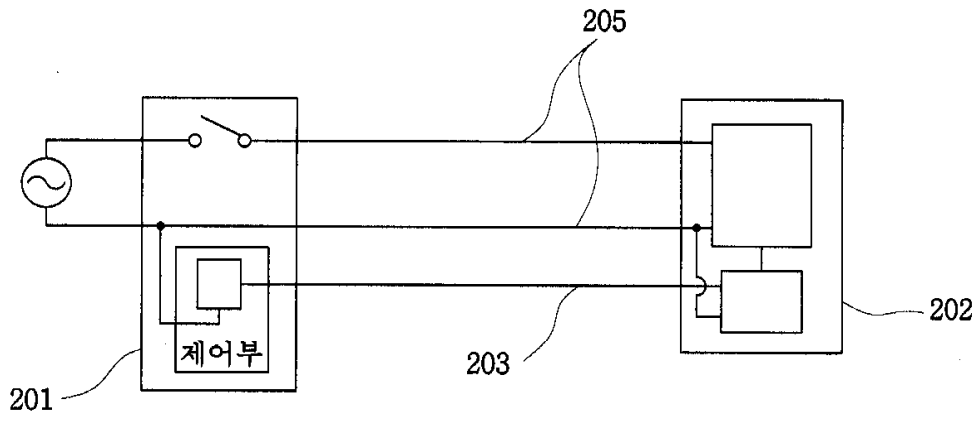
2) (10) (11) (30) (Trigger) (1)  
 (21), (10); (40)  
 (22), (23) (24) (20);  
 (Zero Cross)

3.

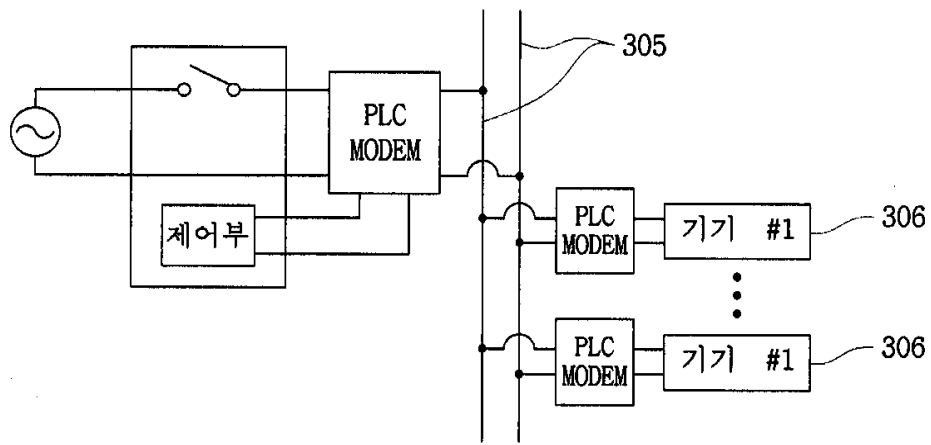
2 (10a) (20a) 가  
 (Zero Cross)



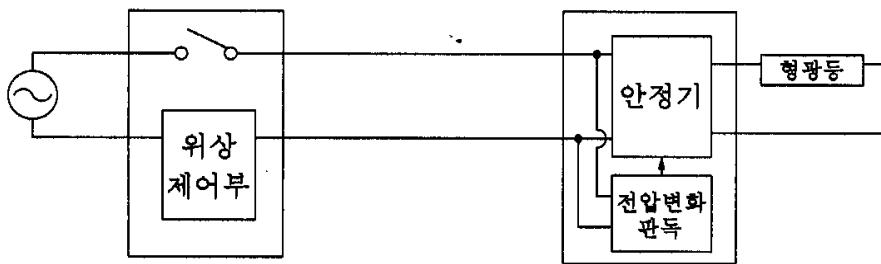
1b



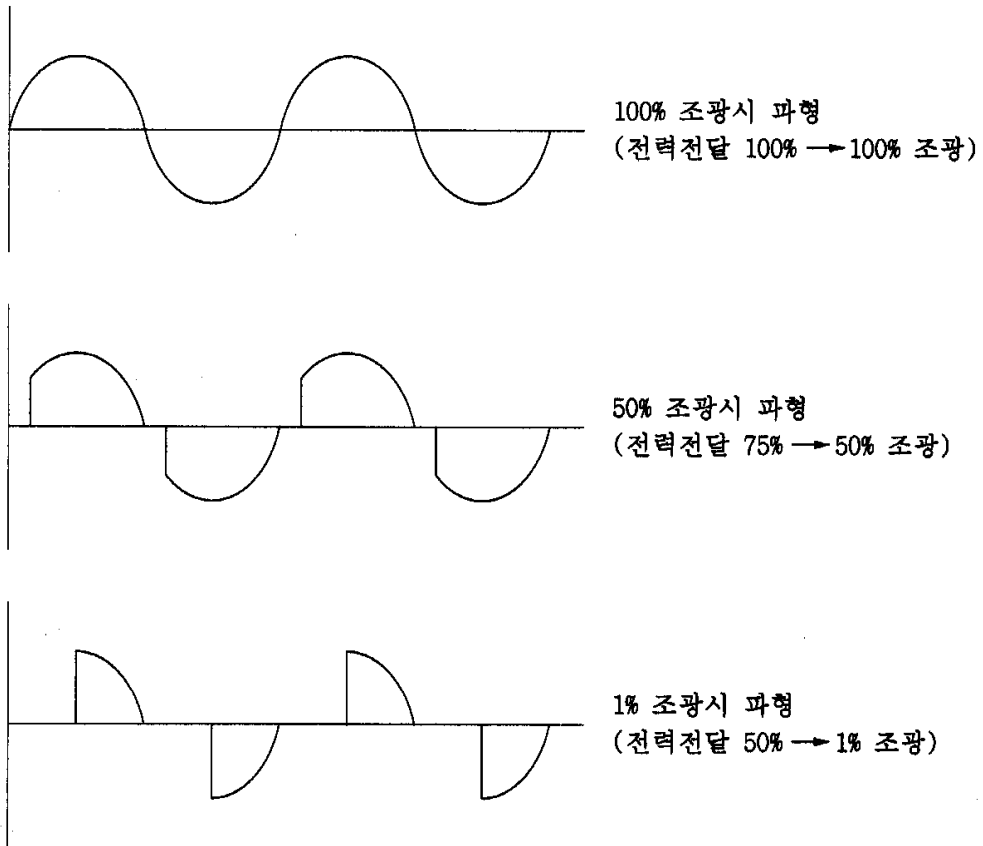
1c



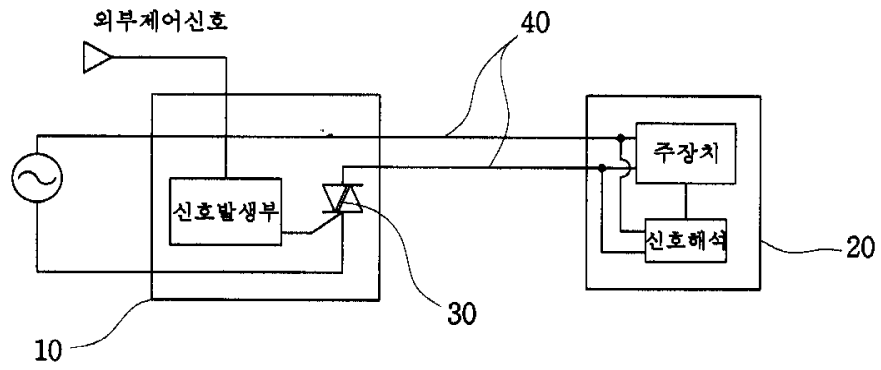
2a

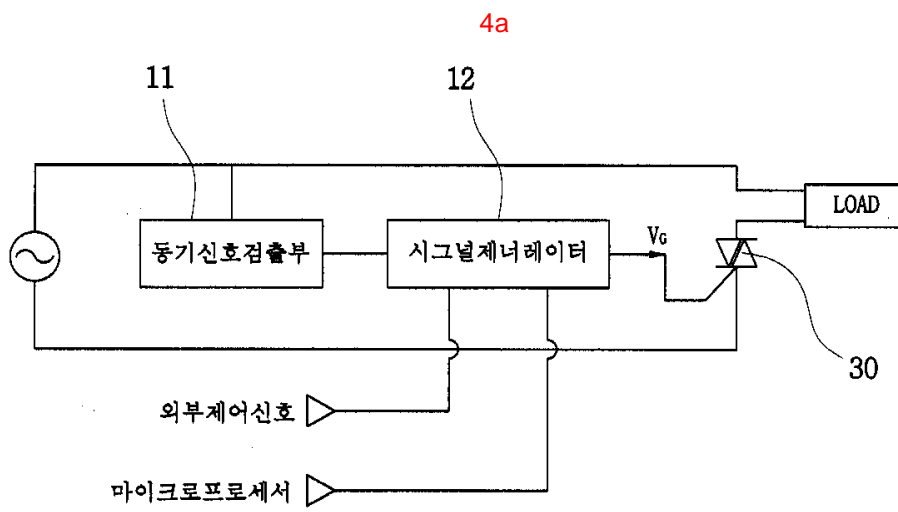
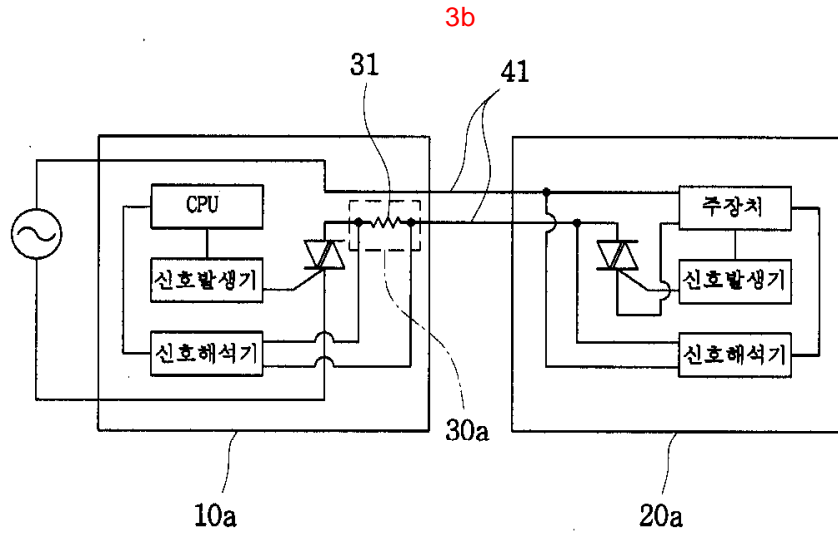


2b

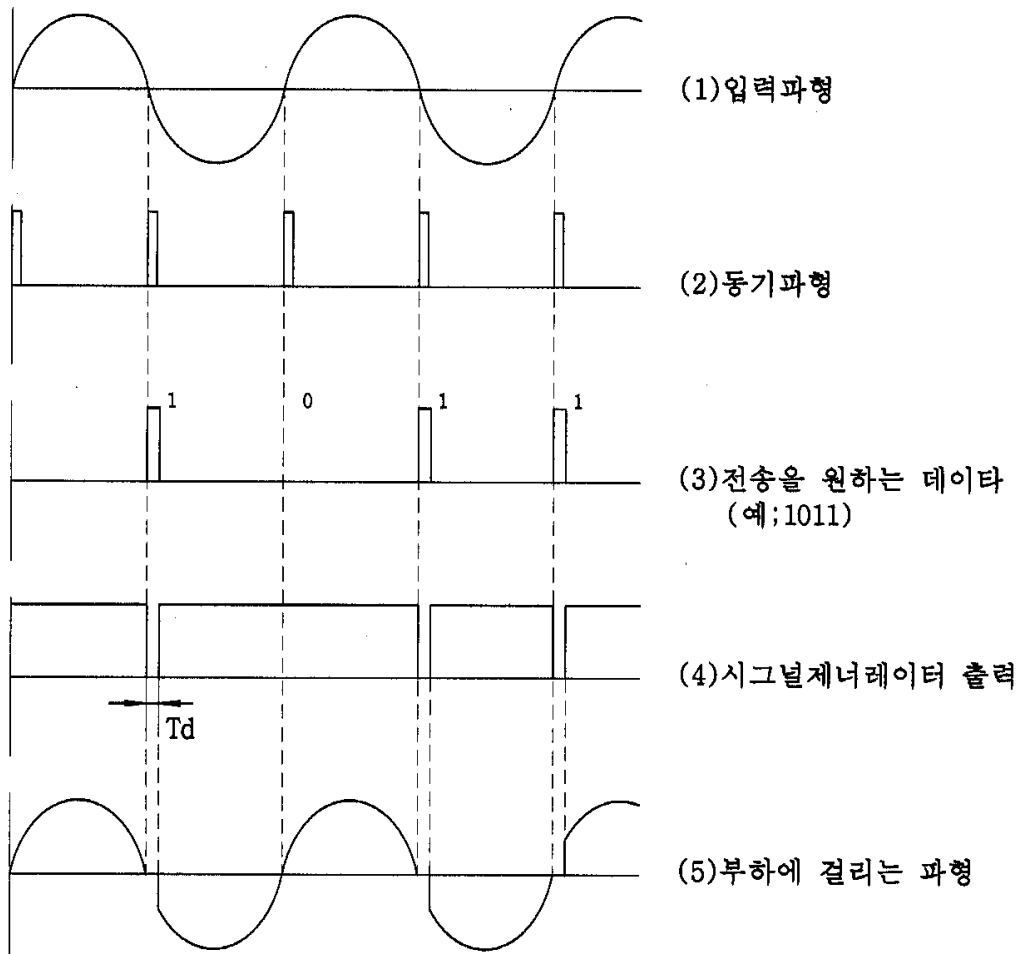


3a

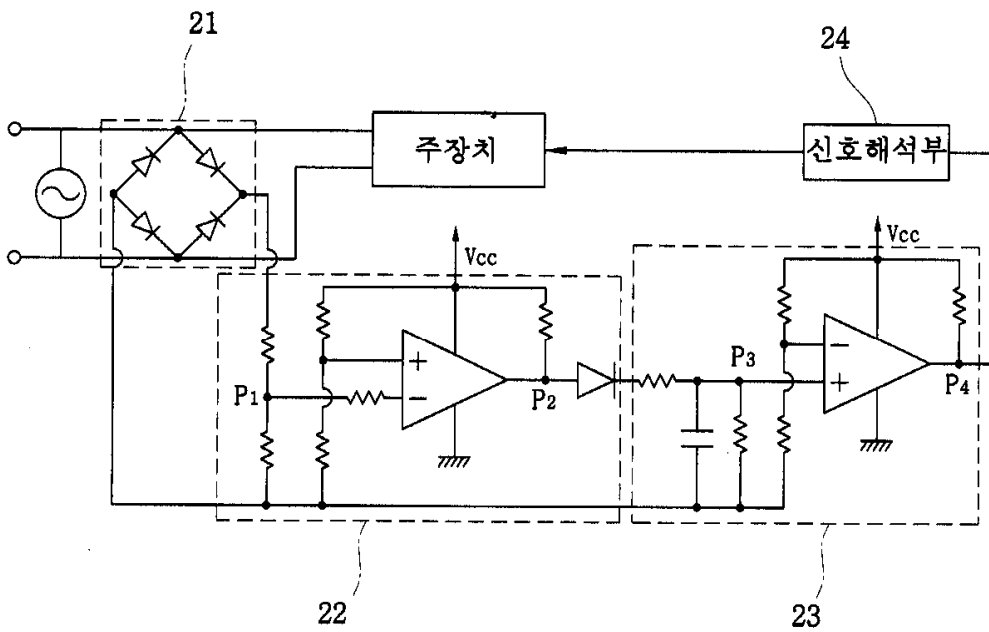




4b

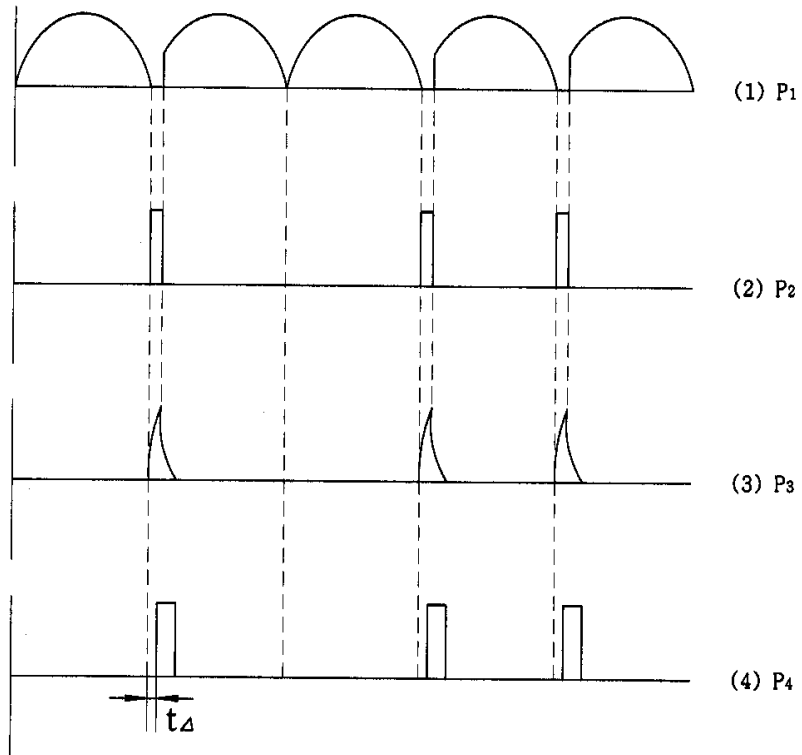


5a

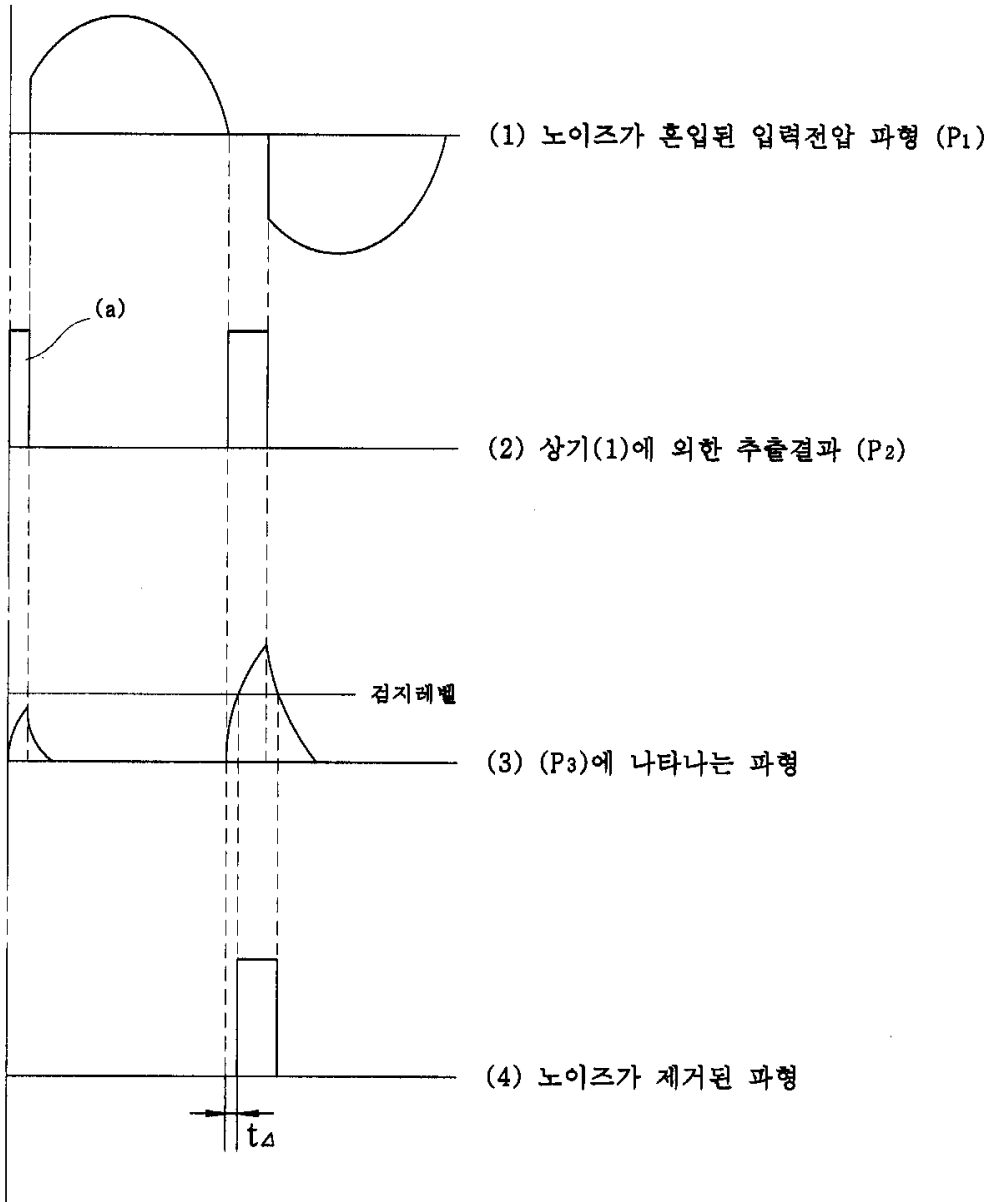




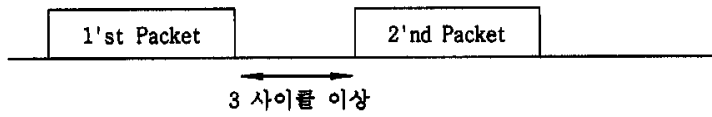
5b



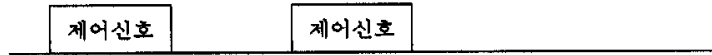
6



(1) Packet의 전송방법



(2) 가장 간단한 Packet의 구성(제어신호 직접 전송)



(3) 가장 간단한 Data의 전송시의 Packet의 구성



(4) ID와 Data로 구성된 Packet



(5) Group, Address, Data로 구성된 Packet

