

(19)  
(12)

(KR)  
(B1)

(51) 。 Int. Cl. <sup>6</sup>  
H04Q 7/20

(45)  
(11)  
(24)

2001 07 12  
10 - 0295397  
2001 04 27

(21) 10 - 1998 - 0031929  
(22) 1998 08 05

(65) 2000 - 0013206  
(43) 2000 03 06

(73)

923 - 12

(72)

555 123 1205

2 112 212

(74)

:

(54)

가

가  
가

가

3

1a

1b

(Cell) 가  
(Point Paging Channel)  
(Broadcast Paging Channel)

1c

2

3

4a

4b

5 4b

6

7

( )

1a - 1e ;

2a - 2e, 2a1 - 2e1 ; 3a - 3e ;

4a - 4i ; 5 ;

6 ; 7 ; PSTN

8a ; 8b ;

9a ; 9b ;

9c ; 100 ; S - ALOHA

200 ; R - ALOHA

S - ALOHA

가

1

가

가

가

가

(PSTN: Public Switched Telephone Network)

가

POCSAG(Post Office Code Standardization Adversary Group)

1,200bps ( 1200 )

BCD

가 가

(FLEX: FLEXible), ETSI(European Telecommunicaion Standar

(ERMES: European Radio MESSage System)

d Institute:

(APOC: Advanced Paging Operators Code)

가

가

가

가

가

POCSAG FLEX

가

가

FLEX

가 ReFLEX

NEXUS가

NexNet, AT& T

CDPD

pACT

가 (Time Slot)  
 R - ALOHA  
 S - ALOHA  
 (Sync)가  
 (MSG1,MSG2)  
 S - ALOHA  
 4a

S - ALOHA  
 가

가  
 ( + 1)가  
 - 1)가  
 , 1  
 - 1)가  
 가  
 , 2  
 가  
 ( 가  
 + 1)가  
 (0)  
 (0)  
 - { /2} + 1)

$$= \left\{ \left( \frac{2^n - 1}{2} \right) + 1 \right\} \text{ (가)}$$

$$\text{MOD} ( \text{가} )$$

$$( \text{가} ) \text{ AND } ( \text{가} )$$

2<sup>n</sup>

n

n

가 (BP)

가

( + '0' )

( ) MOD ( )

가

가

가

가

( )

가

1a (Cell) / 1b

2 , 1c

3

4a , 4b

5 4b , 6 4b

( )

1  
(3a,3b) , (3a,3b) (2a,2b) ,  
(3a,3b) (5) .

(5) (3a,3b) ,  
(6) (PSTN : Public Switched Telephone Network) (7) (  
9a), (9b), (9c) , (8a) E - (e - mail) (8b) (  
(5b) .

(5) (downlink) (1a - 1c)  
(uplink) (ACK),

( )

1b (Cell) /  
(3a - 3i)가  
(5)(3a) .

(3a - 3i) (1a - 1e) (f0) (4a - 4  
i) (RSSI)가 가 ,  
(1a - 1e) (f0 - f4)

(f0) , (4a) (4e)  
가

( )

1a (5) (3a - 3d) " (5)"  
가 (4a - 4i)  
, 가 (1) (5)  
RF .

가 (9a) (9c) PSTN (7) 가  
(5) (F0 - F15) (B0 - Bn)가  
, 2<sup>n</sup> , n 4 16 (F0 - F15) .

(ID) (F0 - F15) (CNTL), (SC) , (FI),  
(MSG) , (1)

(1) 가

( )

1c

(3a) (2) (3a - 3i)가 (5)

(3a - 3i) (1a - 1e) (f5) (4a - 4i)  
(2a - 2d, 2a1 - 2e1,...) (3a - 3e)

( )

(1) (uplink) (5) 2

( ) (1) (cycle)(CC)( )  
가 가 6400bps , 60 가 800bps

2 ( , ) (T0 - T9) , 가 800bps

가 가

(CC) (B0) 가 가 (FI) 4 (F3)  
(5) (1) (F3)

(1)

(Slotted ALOHA; " S - ALOHA" ) (protocol) S - ALOHA  
(100) , 가 (Reservation ALO  
HA: " R - ALOHA" ) R - ALOHA (200)

(100) R - ALOHA (200) (CC) 10 (T0 - T9) 2 , S - ALOHA

S - ALOHA (100) 5 (T0 - T4) S - ALOHA  
(5) (1) (5)

(1) (5) (5) ( )

, R - ALOHA (200) 5 (T5 - T9) R - ALOHA  
(5) (1)

R - ALOHA (1) (5)

S - ALOHA (100) R - ALOHA (200) 가 (5)

(BDR) (1) (BDC) (BDC)

( )

3 7

(1) /

가 BDR 1 2 1

[ 1 ]

| (bps) | 1 (bit) | 2 (bit) |
|-------|---------|---------|
| 800   | 47      | 130     |
| 1600  | 47      | 130     |
| 2200  | 67      | 160     |
| 6400  | 67      | 160     |

1 (CC) 1 가

BDR 1

1 = "{ ( " - 1 )

/ 2 } + 1 ( , { } )

, { }

- 1) 1 ( 가 ) < ( +  
(A = " " 가 - 1) A  
, ( - A )

- 1) (B = " " , ( 가 ) ( +  
, ( - B + 1) B 가 B  
가 , B

가 800bps , BP가 '00' 10 [ (10  
 )/2 + BP(0)] 가 5가 . (PIT ="000) ,"  
 (PIL ="50)" (4 x 50) bit ="200bit가" .

)} + 1 = "{ ( " (200bit) - 1 (68bit)) / 2 (130bit  
 . 3 .

( 가 (5) (3) + (3) - 1)  
 ( 가 (5) - (3) - 1) '1' 1  
 , ( - A (1)) .

(T2 - T4) 7 . , (T3) / (T2,T4) 3

(2) /

PIT 가 , , 가 가 가  
 . 가 PIL '0' 가 .

(3) /

2  
 = "MOD( " , BDR) ( , MOD(x,y) x y )  
 '0' 가

3 .

3  
 = "( " ) AND ( )

00 5bits, 3200 5bits, 6400 6bits .... (bps)가 800 4bits , 16

n ="4 " (2^n) 16 , n ( 4 )  
 가

/

, LSB 5 800bps 8 '2' (A) 가 (1F3C4)<sub>16</sub>  
 5 '3C' ="60 " , (B) 가 (IF3B4)<sub>16</sub> , LSB  
 '0' , (B) MOD(59,2) '1' (A) MOD(60,2) '0'  
 (B) MOD(59,2) '1' .

(4) /

'0' 가 .  
4 .

4  
=" " (BP) + (SPNo)

가 ( , NB ="0) " ,  
가 , NB ="0 " ,  
가 , NB ="1 " ,  
NB(Next Batch) 가  
( ) .

3 .

(Sync)가 (S6). ,  
(Sync)

(S7). , 1 , 2

( + - 1)가 가 (S8).

( + - 1)가 가 (S9), ( 가 +1)가 (0)  
- 1)가 가 (S10).

( - +1)가 (0) (S11)  
,S12). ( { /2} +1)

( ) MOD ( 가 ) (S5).  
4b (Sync)가

, (FEC) 6 (Sync) , (header), LPN( ), 1 ,

, (FEC) 1 , LPN  
" 0" , " 1" 1 .



4.

1 , , 가

가  
(BDC)

5.

1 , 가

가

6.

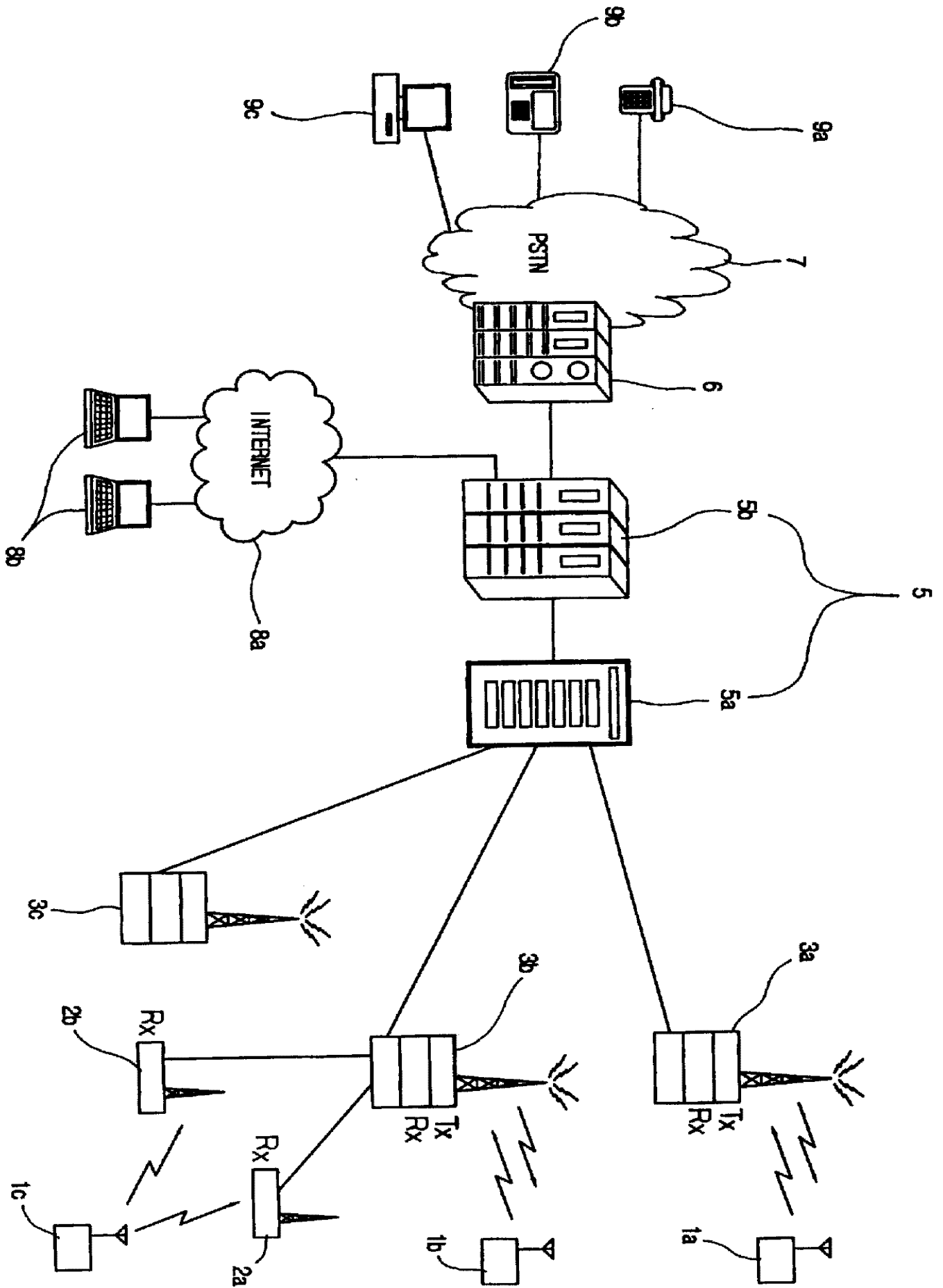
,  
가 가  
, 가  
,

7.

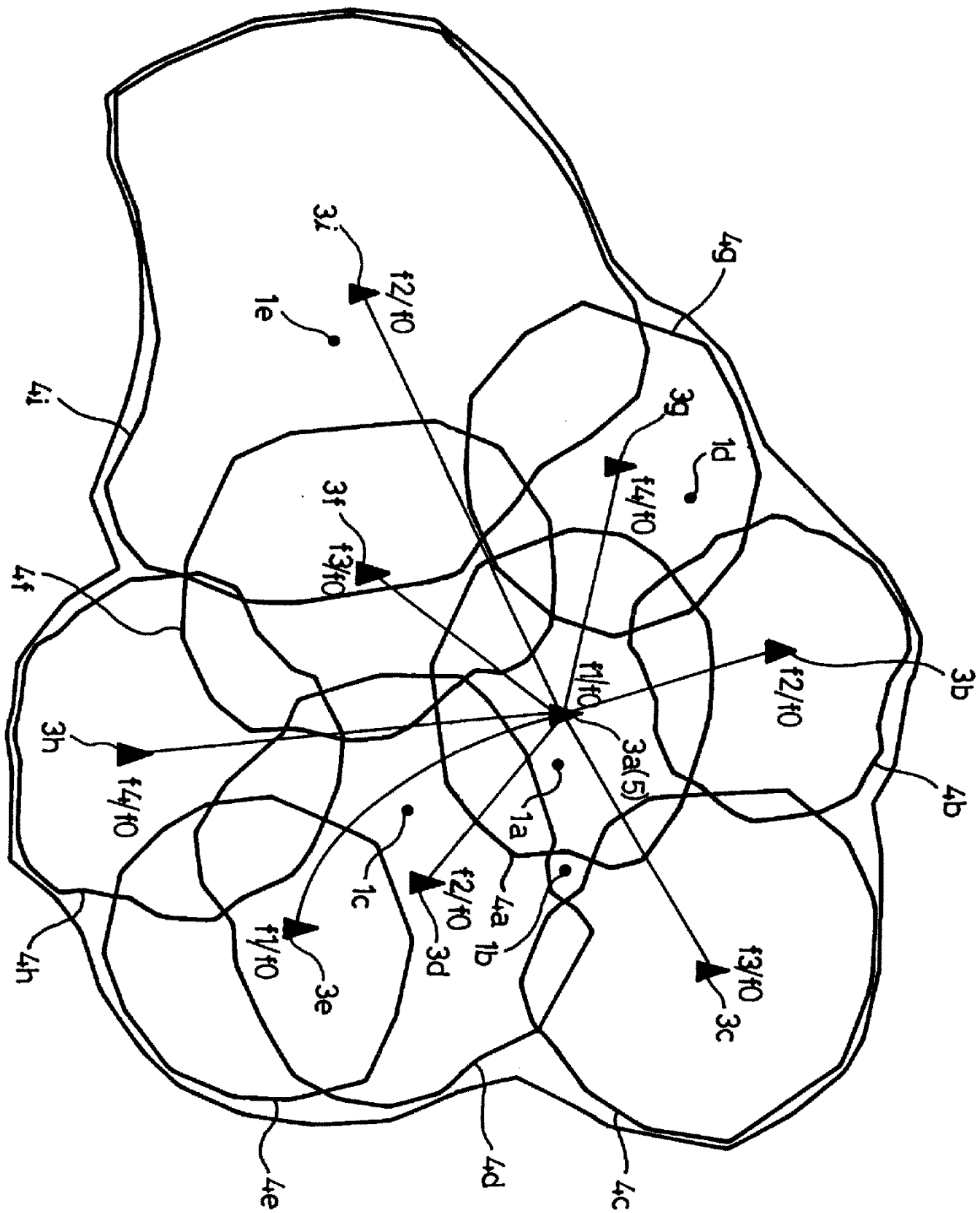
6 , 가

가

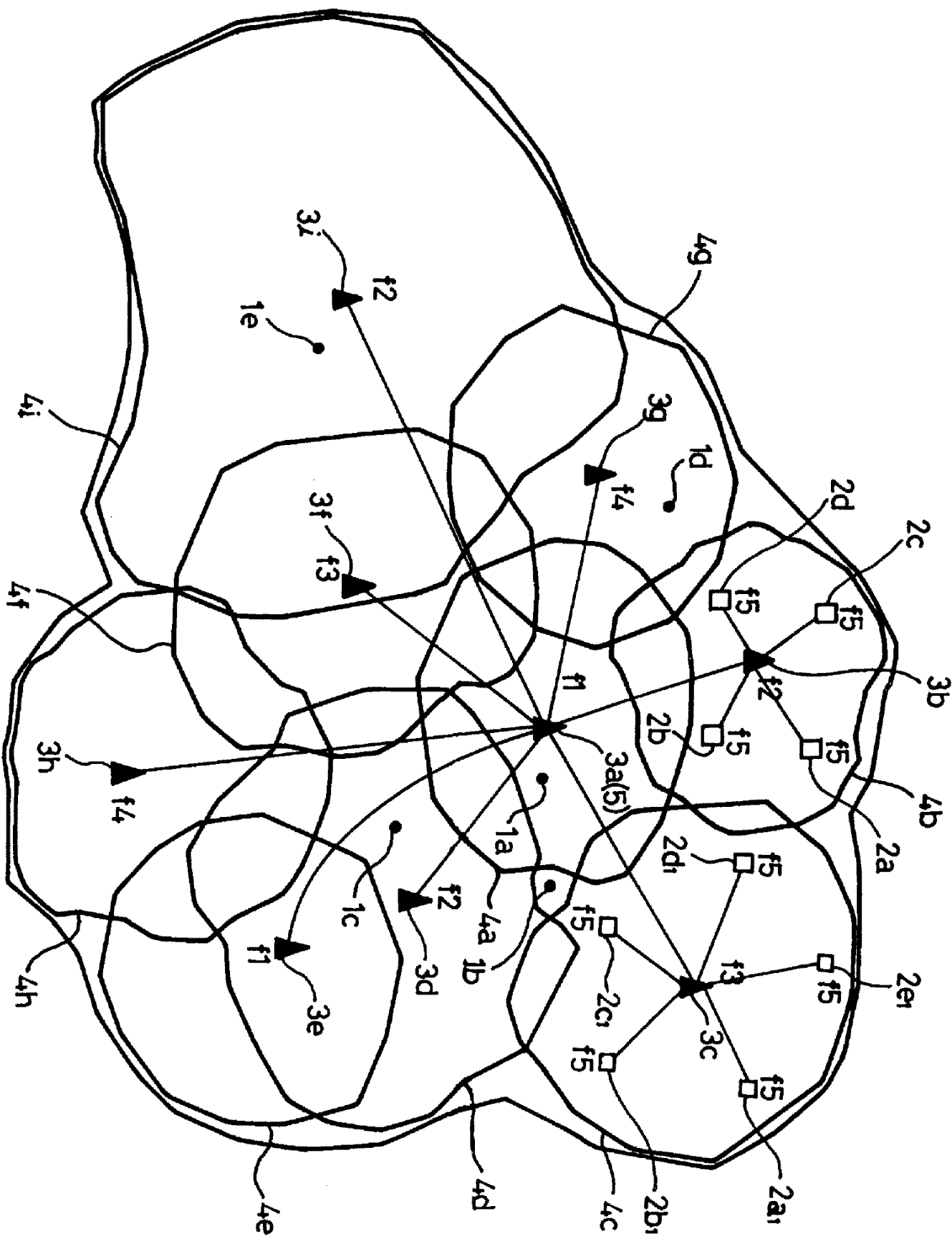
1a



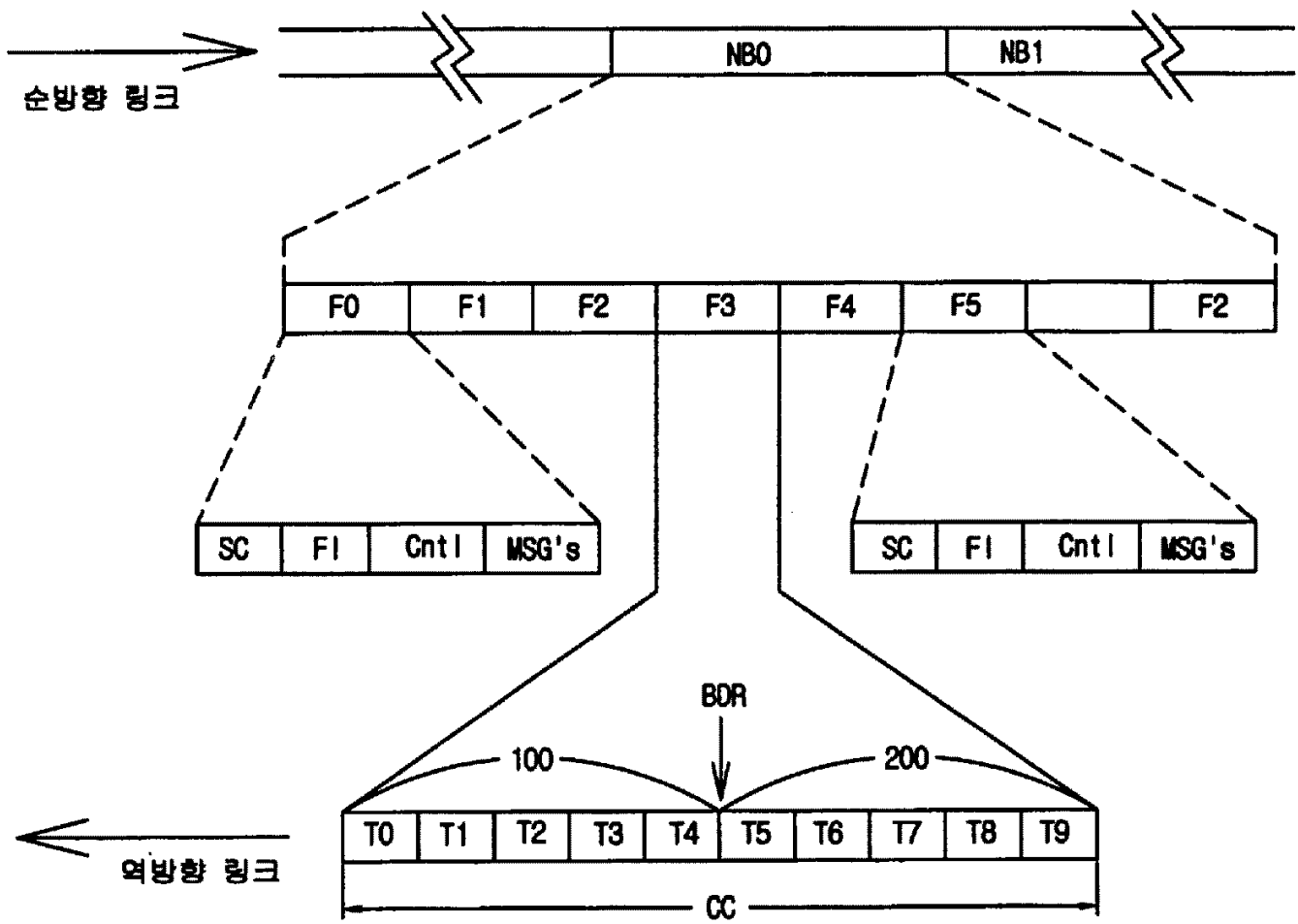
1b

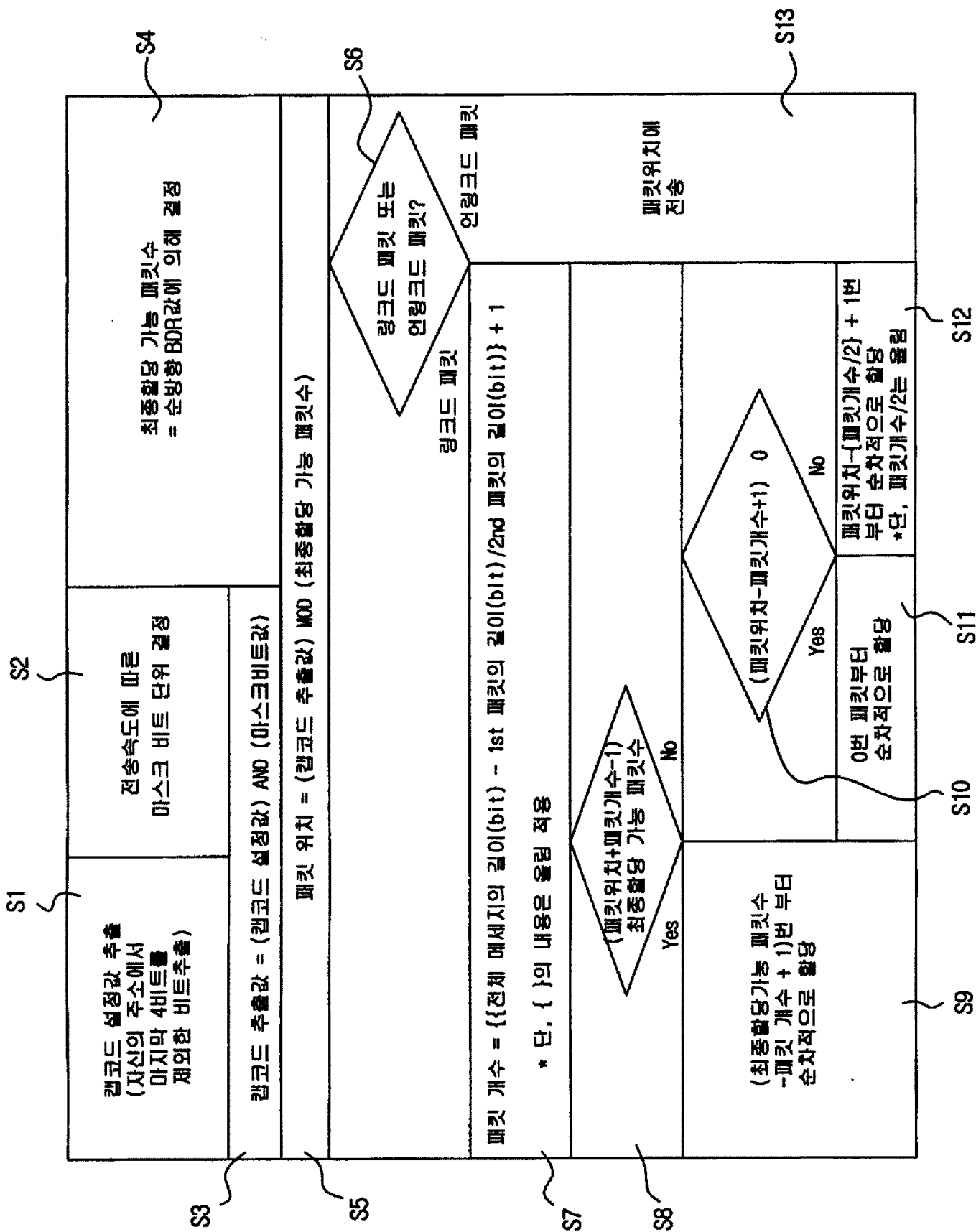


1c

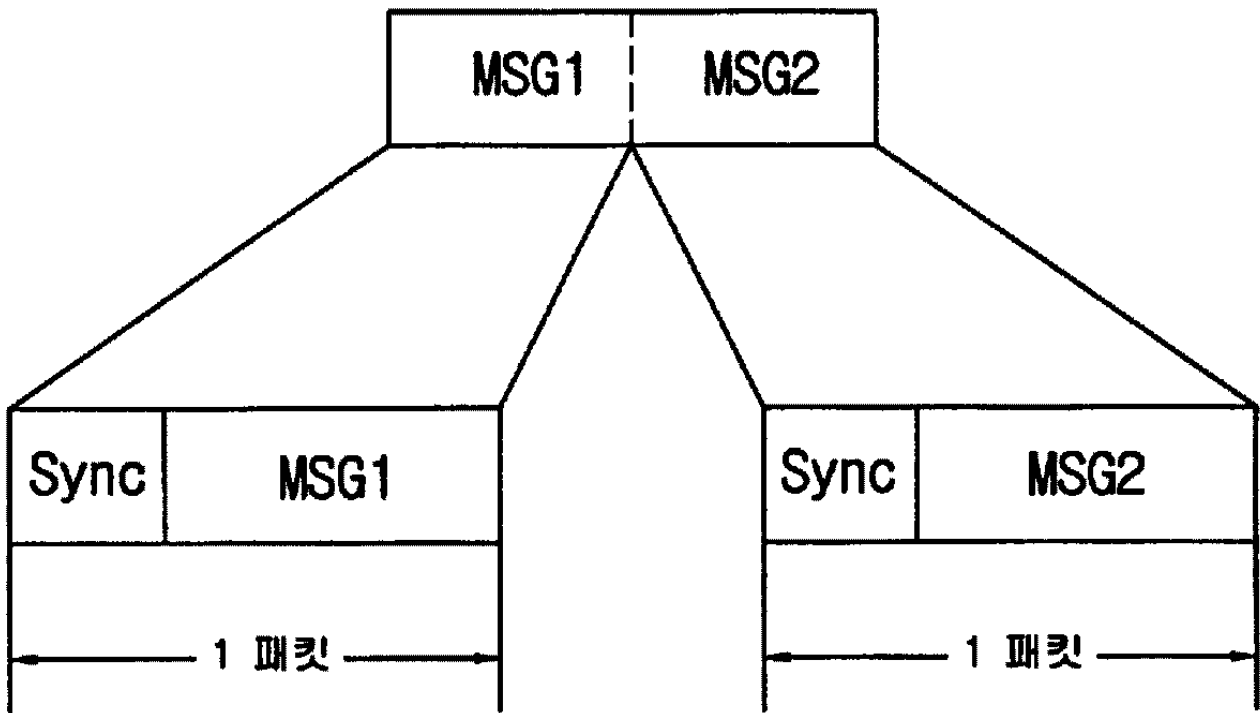


2

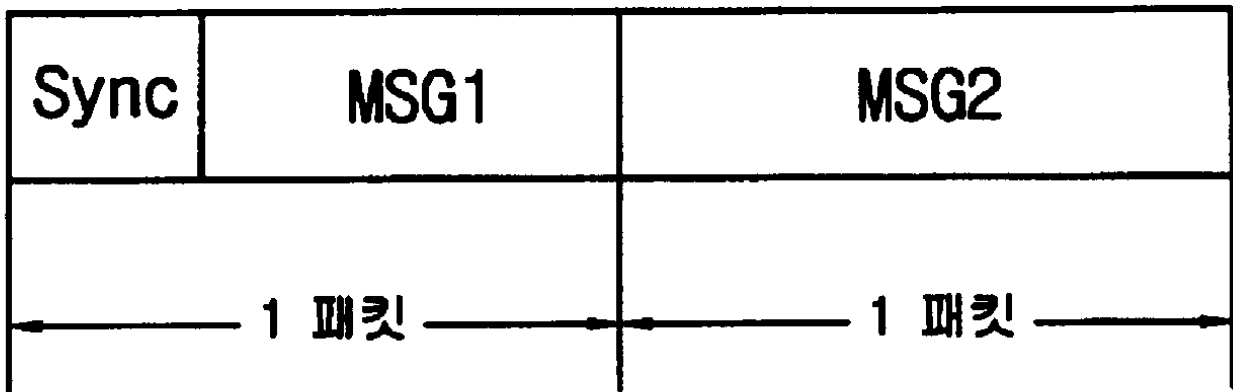


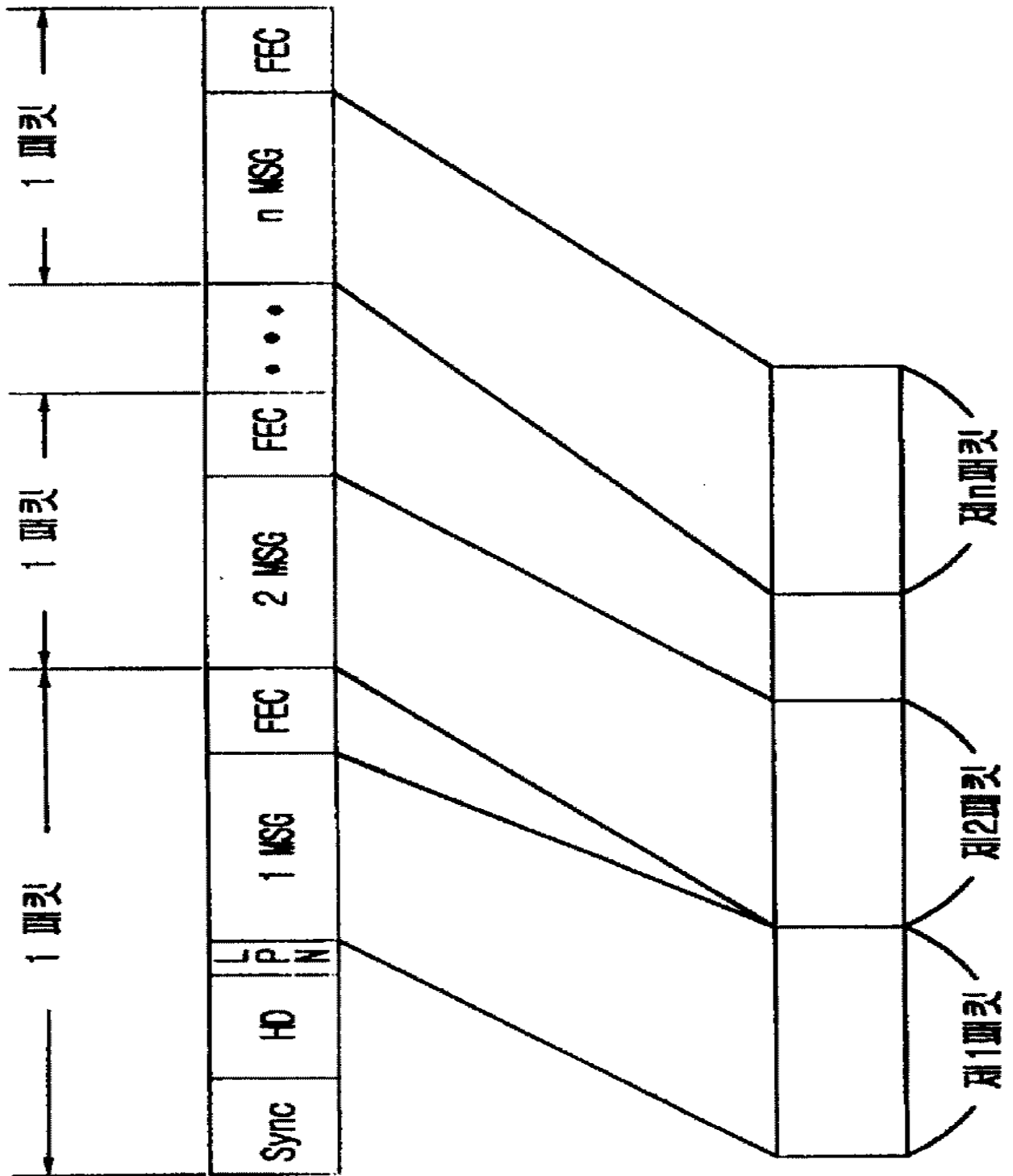


4a



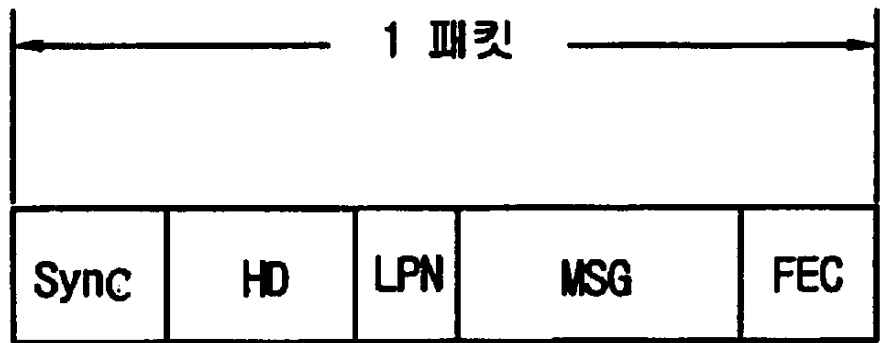
4b





링크드 패킷

6



연링크드 패킷

7

