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(12) (Y1)

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(30) 60/334,345 2001 11 29 (US)  
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(72) 2 3 7 2046  
(74)

가 :

(54) 1 2 (TDD) (B)

B LCR TDD B 1  
, 1 B (組) 2  
.1 1 (P - CCPCH) , 2  
(DwPTS) .

2

1

2 1

3 PSC 832 DL P - CCPCH .

4 PSC P - CCPCH .

5 .

6 PSC 2 B .

7 2 B PSC (UE) .

8 2 .

<

10, 50:

69, 82:

70, 71, 72:

76: 가

80:

90:

91:

92:

(TDD) B

TDD B (sync)

1 10ms 2 5ms . 1

2 가 (UL) (DL) (LCR) TDD , " "

LCR TDD

1 (DwPTS), (GP) 1 (P - CCPCH),

(BCH) (UpPTS) . 1

, 64 DL 가 32 (DL) P - CCPCH . DwPTS

TDD N 1 1 가 ,  
 N 1 , N 1  
 1 M 32 L=N/M , L M DwPTS  
 DL B DwPTS DL

B DL (UE) (UE)가 B  
 32 가 DL 5ms 6400  
 1 DL 가 , ( P - CCPCH가 4 DL  
 1 ), 4 가 가 P - CCPCH / CRC

DwPTS DL P - CCPCH DwPTS QPSK(Quadrature Phase  
 Shift Keying) DL [ 4 (phase quadruple) ] 4 (TS0) (m(1))  
 P - CCPCH 가 P - CCPCH  
 1 QPSK DL , 45 ° , 135 ° , 225  
 ° 315 ° 가 4 2 (S1 S2) , P - CCPCH 1 LCR TDD  
 , BCH , BCH (TS) 2 ( ,  
 DwPTS DL S1 P - CCPCH 1 S2 P - CCPCH 2) (寫像)  
 LCR TDD 2 TS 2  
 [(SFN mod 2)=0] 1 4 4

[ 1 ]

	4	
S1	135 ° , 45 ° , 225 ° , 135 °	4 P - CCPCH가
S2	315 ° , 225 ° , 315 ° , 45 °	4 P - CCPCH가

64 DL 1 QPSK 가 P - CCPCH BCH 2 (20ms)  
 2 4 CRC 1 BCH  
 가 2 4 DL 4 QPSK 가 , 1 QP  
 SK P - CCPCH ,  
 BCH (20 ms ) (SFN)  
 n n+1 DL QPSK S1 P - CCPCH  
 , P - CCPCH n+2 n+3 , n+2  
 1 QPSK n n+1  
 (UE)가

, DL (UE) 64  
 (UE) B DL  
 , 6400 32 DL ( , 64 )  
 5ms 6400 × 32 × 64 = 13,107,200

B LCR TDD B 1  
 , 1 (組) 2  
 (DwPTS) 1 (P - CCPCH) , 2

가  
 SC DwPTS PSC (組) 2 (SSC) B 1 (PSC) S  
 PSC가 B 32 DL B  
 O(L) O(2\*log(L)) (Hierarchical Golay code)

2 (10) (10) P - CCPCH(12), DwPTS(14),  
 GP(16), UpPTS(18) (20a 20n) P  
 - CCPCH(12) 1 PSC(22) 3 PSC(22)가 SSC  
 , PSC(22) (peak) SSC 1 가 ( 16  
 32 )

, P - CCPCH(12) 832 1  
 . PSC {C0, C1, C2, C3...C831} P - CCPCH 4 (69)  
 , P - CCPCH 1 (T0) , P - CCPCH 1 P - CCPCH 2  
 (70, 71) PSC (72) (70, 71, 72) 가 (76)  
 (78) (80) (78) (T0)  
 (82)

5 (90) (91) (92)  
 (91) 가 (92) 3 (70, 71, 72)

1) (time duration) , 2) 가 ,  
 832 B (UE) .  
 B PSC . PSC 가 (832 PSC ), B  
 PSC .  
 6 B PSC B PSC , 1  
 B PSC(26) 가 {C0, C1, C2...C831} . 2 B PSC(28) {C26...C831, C0, C  
 1, C2...C25} , 가 26 1 B PSC(26) .  
 832 PSC B 가 B PSC

(half - chip) 가 . CDMA  
 2 n, n+1/2, n+1, n+  
 3/2, n+2, ... . PSC  
 . PSC 가 , 2 B PSC(28) {C  
 26...C831, C0, C1, C2...C25} . 가 , B PSC  
 . 1 32 (N=32)  
 ( ) .

1 칩분리도=(PSC칩길이)/N

, PSC가 832 가 32 26 가 . (UE)  
 832 PSC . PSC 5ms  
 , DwPTS N=32 가  
 , DwPTS DwPTS N=32 DL 2  
 (SSC) .

7 , 1 B , 832 (sliding window) 2 B  
 . 5 B 1 " " 26  
 . PSC B 5 1 B 2 B  
 DL 10 x log (832/64) = 11.1dB

DL 가

PSC [ , (wrap - around) ] , PSC

가 , N M B

N=16

, PSC 5ms  $6400 \times 832 + 32 \times 32 \times 64 = 5,324,800 + 65,$   
 535 = 5,390,335 5ms 13,107,200 2.5  
 16 32 PSC  
 5ms 171,000 350,000

8 , 2 (50) (50) P - CCPCH(52),  
 DwPTS(54), GP(56), UpPTS(58) (60a 60n)  
 (50) PSC(62) DwPTS(54) PSC(62) PSC가 (  
 , 64 )  
 (UE) DwPTS(54) PSC(62) (SSC ) DL  
 DwPTS(54) PSC(62) 64

, PSC .1  
 6 32 PSC  
 , 5ms 171,000 350,000

(57)

1.

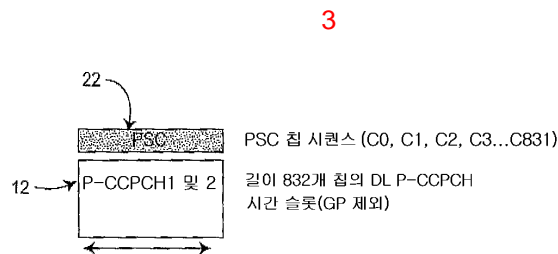
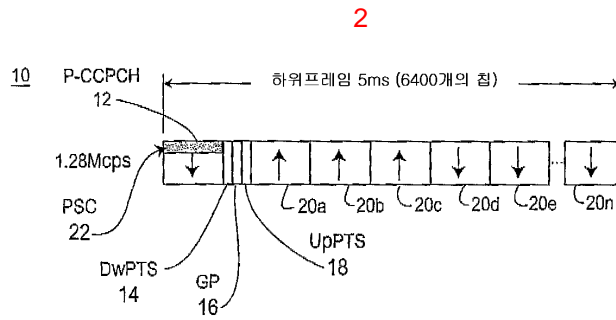
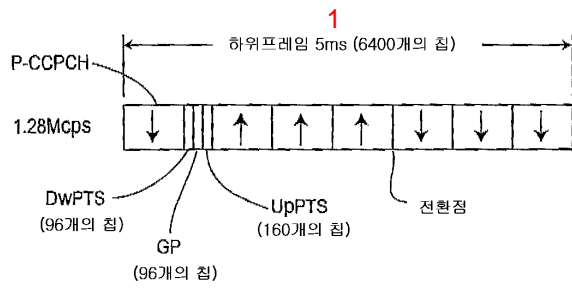
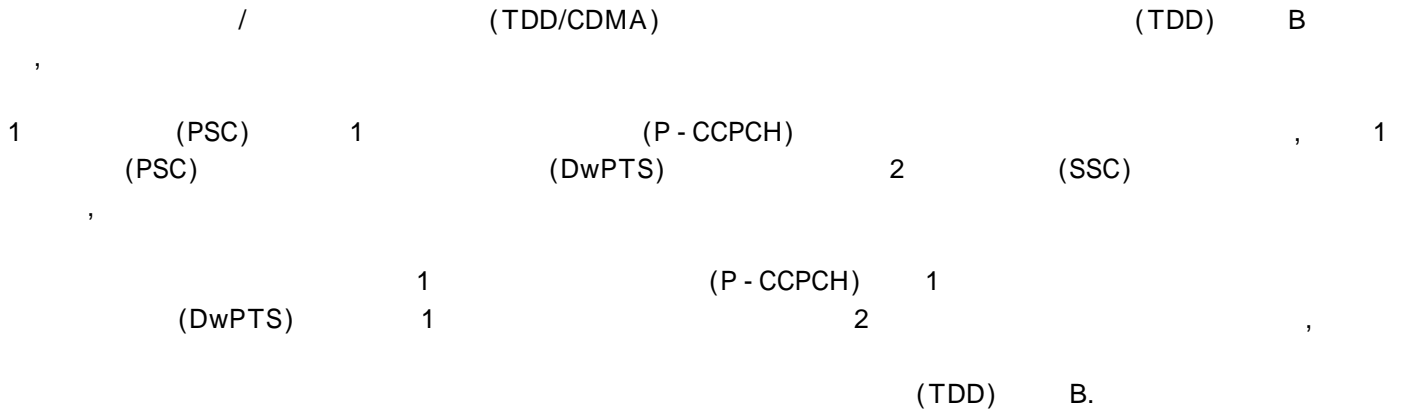
/ (TDD/CDMA) B ,

1 (PSC) 1 (P - CCPCH) , 2 (SS  
 C) (DwPTS) , 1 (PSC) 2 (SS  
 C)

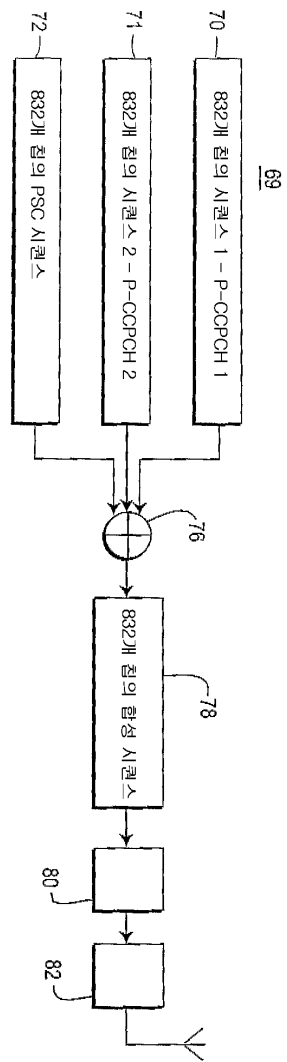
1 (P - CCPCH) (DwPTS)

B.

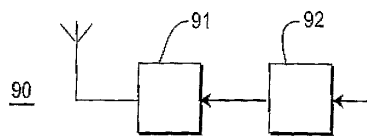
2.



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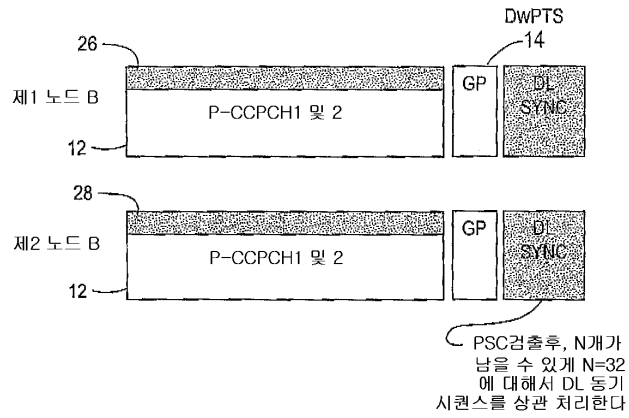


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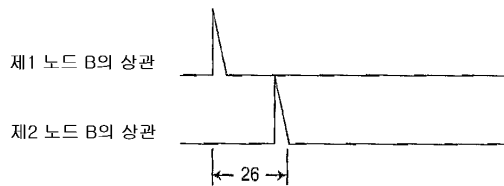




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7



8

