

(19)  
(12)

(KR)  
(A)

(51) 。 Int. Cl. <sup>7</sup>  
H04B 7/26

(11)  
(43)

2002 - 0093211  
2002 12 16

(21) 10 - 2001 - 0031661  
(22) 2001 06 07

(71) 99

(72) 4 841 - 13  
90 - 7105

809 - 1101

910 - 702

(74)  
:

(54)

IMT - 2000

가 , Tinit\_sync 0 ( , Tinit\_sync 0)가 ,  
 256 가 Tinit\_sync  
 가 , Tinit\_sync 256 ( , Tinit\_syn  
 c > 256) , 256 Tinit\_sync  
 , Tinit\_sync 0 Tinit\_sync  
 Tinit\_sync

5

IMT - 2000,

1 IMT - 2000

2 2

3

4 3

5

10,UE1,UE2,UE3 :

20,NB :

30 :

IMT - 2000

(Uplink Synchronous Transmission Scheme : USTS)

(UE) (Node B)

(orthogonality)

ip propagation delay)

(round tr

가

USTS

IMT - 2000

(CDMA)

USTS

IMT - 2000

IMT - 2000

(downlink)

1

(System F

Frame Number : SFN) (Frame n - 1, Frame n, Frame n+1, Frame n+2)가 0 4096

(Connection Frame Number : CFN)가 256

N( CFN)

10ms

SFN

SF

10ms 15 USTS

(Downlink DPCH) (slot#0 slot#14)

(One Radio Frame)

IMT - 2000

20ms

USTS

(Time Alignment Bit : TAB)

(transmit power control : TPC)

TAB

TAB

1/4

TAB 가 " 0 "

(Uplink)

TAB 가 " 1 "

1/4

( USTS

USTS

256

USTS가

IMT - 2000

256 (chip)

38400 ( 10ms)



가 1 , 256  
 가 2 , 256 ( )  
 )  
 ,  
 ,  
 3 (UE1,UE2,UE3)가 32 , 128 , 192 , (Node B : NB) 3  
 (One - way Propagation delay)  
 ,  
 4 3 , DL UL (Down  
 Link) (Up Link) , SFN (System Frame Number)  
 , DPCH1, DPCH2 DPCH3 1 (UE1), 2 (UE2) 3 (UE3)  
 ,  
 USTS가 IMT - 2000  
 ( )  
 SFN USTS ( Tinit\_sync ) ( DPCH,n ) ,  
 ,  
 3 4 , 1 (UE1) DPCH,1 '0' , 32  
 64 가 (NB)  
 256 1 (UE1) Tinit\_sync\_1 256  
 64 192 1 (UE1)  
 T0(=1024 ) Tinit\_sync\_1(=192 )  
 (NB) (64 ) + T0(1024 ) + Tinit\_sync\_  
 1(192 ) = 1280 ,  
 (64 ) + Tinit\_sync\_1(192 ) = 256 , (SP) DPCH,1 (0 ) +  
 ff=1) 256 (chip\_o  
 ,  
 2 (UE2) DPCH,2 가 256 , 128  
 258 가 (UE2) Tinit\_syn  
 c\_2 0 , 2 1 (UE1)  
 DPCH,2 Tinit\_sync\_2 (SP)  
 512 (chip\_off=2) ,

3 (UE3) DPCH,3 가 256 , 192  
 384 가 . Tinit\_sync\_3 128  
 , (UE1) D  
 PCH,3 Tinit\_sync\_3 (SP) 768  
 (chip\_off=3) , 2 (UE2) , 2 (UE)가 (NB)  
 1 , ,  
 T0 , ,  
 T0 , ,  
 , 5 , ,  
 , Tinit\_sync 가  
 TAB , Tinit\_sync '0' 가  
 t\_sync , Tini  
 , 5 S501 S503 ( ,  
 RNC)(30) (20) (Measurement Control) (UE)(10) (S  
 501), (10) Tinit\_sync '0' , 'Tinit\_  
 sync 0' 가 (S502),  
 (Measurement Report) (20) (20) (30) (  
 S503).  
 , Tinit\_sync , Tinit\_sync  
 , Tinit\_sync '0' , 'Tinit\_sync < 0' , lub  
 ,( )  
 Tinit\_sync '0' (20) (30) (10)  
 (S504), (20)  
 (Radio Link Reconfiguration Message) (S505), (20)  
 ion Ready Message) (30) (S506), (30) (Radio Link Reconfigurat  
 256 가 가 Tinit\_sync ,  
 (S507,S508), (20) (10)  
 (10) ,  
 Tinit\_sync (S509),  
 (20) (20) (30) (S510).  
 (UE) 2 (UE2)가 T\_init\_sync 4 2  
 가

(SP) 512 (chip\_off=2)  
 '512 + 256 = 769 (chip\_off=3)'

Tinit\_sync '0' 가 2 '0 - 2 = -2'  
 Tinit\_sync 'Tinit\_sync 0'

ync Tinit\_sync '(256 x 2) - 258 = 254'

가 USTS (Tinit  
 \_sync) 가 Tinit\_sync 256  
 256 Tinit\_sync

5

(SP) 512 (chip\_off=2)  
 '512 - 256 = 256 (chip\_off=1)'

Tinit\_sync '255' 가 '- 2' '255 - (-  
 2) = 257' Tinit\_sync 'Tinit\_sync > 256'

Tinit\_sync

가 256 가 , Tinit\_sync 0 ( , Tinit\_sync 0)가  
 Tinit\_sync

가 가 , Tinit\_sync 256 ( , Tinit\_sync > 256)  
 256 Tinit\_sync

, Tinit\_sync 0 256  
 Tinit\_sync

가

IMT - 2000 USTS 가

가 Tinit\_sync 0 가 가 가  
 Tinit\_sync T0 256 USTS

USTS

(57)

1.

(SFN)

가 0 1 2 ; 1 ;

1 2 ; 2 ;

3

2.

1 ,

1 , 가 ,

3.

1 ,

2 , ,

4.

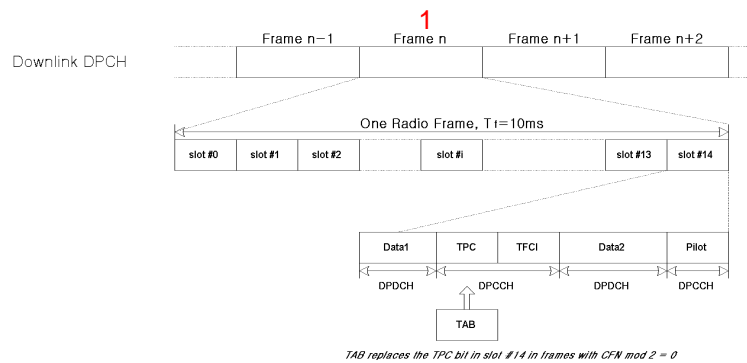
1 3 ,

256 , 38400

5.

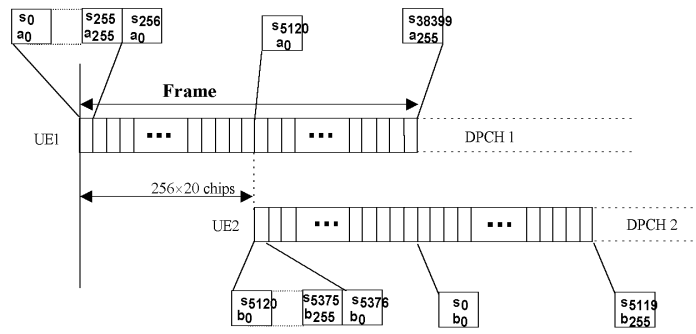


1 ,  
 1 2 /  
 .  
 6.  
 1 ,  
 1 2  
 .  
 7.  
 1 ,  
 3  
 .

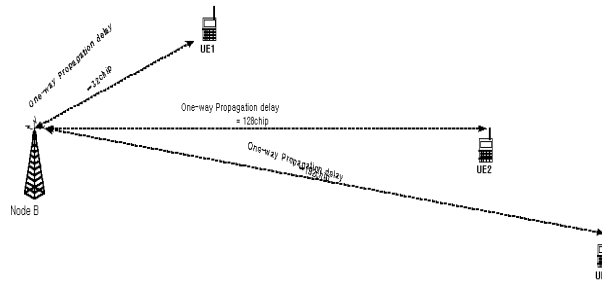


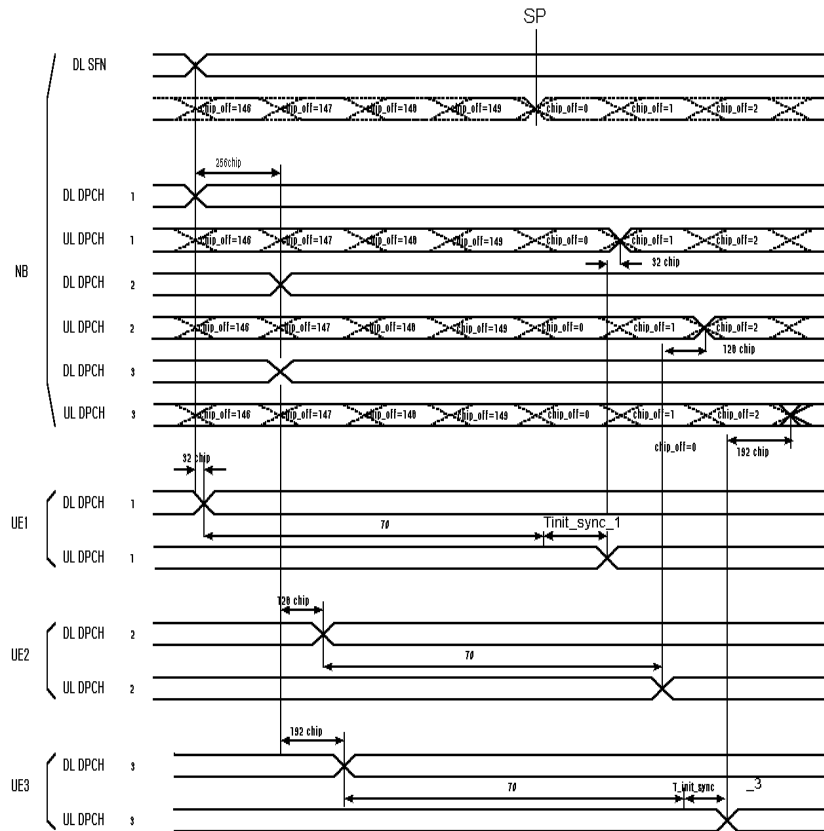
TAB replaces the TPC bit in slot #14 in frames with CFN mod 2 = 0

2



3





5

