

(19)
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(A)

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H04B 7/08
H04B 1/06
H04B 1/16

(11)
(43)

10-2004-0075326
2004 08 27

(21)
(22)
(86)
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10-2004-7009072
2004 06 11
2004 06 11
PCT/IB2002/004882
2002 11 20

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WO 2003/050993
2003 06 19

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60/341,508
10/185,385

2001 12 13
2002 06 28

(US)
(US)

(71)

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1

(72)

, ,
, ,
, ,

5656,
5656,
5656,

6
6
6

(74)

:

(54) C O F D

가 IEEE(Institute for Electrical and Electronic Engineers) 802.11a ETSI(European Telecommunications Standards Institute) HiperLAN2(High Performance European Radio Local Area network version 2) , (WLAN)

ng;CDFDM) (coded orthogonal frequency division multiplexing) CDFDM 가 가

(coded orthogonal frequency division multiplexing)

1

가

가

; ' (or)' ; ' (include)' / ; '~ (comprise)' ; '~ (associated with)' ; '~ (associated therewith)' ; '~ , 가 , , , , 가 ; '~ (controller)' 가 , , , , ,

1

2

가

3, 4A-4D 5A-5D

6

1 3 6,

1

(100)

(103)

(101)

(102)

가 IEEE 80

2.11 HiperLAN2

(103)
가

(103)

가

가

(101)

(105)

(108),

(104),
(IFFT)(106)(
(109),

가

(110)

(107),

/
가

(101)

(103)

가

(110)

(102)

가

()

(102)

(111a 111b)

(

)

,

(102)

(111a 111b)

(113a, 113b)

(FFT)

(112a, 112b),

(114a, 114b),

(115a, 115b),

(116a, 116b)

(C1

C2)(117a, 117b)

(111a, 111b)

(116a 116b)

가

COFDM

(116a 116b)

:

$$m_i^c(n) = -\min_{x \in S^c} \|y - hx\|^2, c = 0, 1 \quad (1)$$

m

i

y

, h

(

(1)) , x

, c '0' '1'

,

(116a 116b)

(117a 117b)

(119)

(120)

가 (118)

,

(122)

/

(123)

(BER)

(121)

2
 (200) , 가 (202a, 202b), (203a, 203b), (204a, 2
 04b), (205a, 205b) , 가 (206) (207) (201a, 201b) (208)

3, 4A-4D 5A-5D

(1)
 (2)

4096

250

100

가

3

4A 4D

(SNR)

(BER)

4A 1/2

3/4 BPSK(binary phase shift key)

;

4B 1/2

3/4 QPSK(quadrature phase shift key)

; 4C 1/

2 3/4 16-QAM(quadrature amplitude modulation with sixteen discrete levels)

; 4D 2/3

3/4 64-QAM(quadrature amplitude modulation with sixty-four discrete le

vels)

-- 4-6 (dB) --

가

5A 5D

SNR

BER

5A 1/2

3/4 BPSK

; 5B 1/2

3/4 QPSK

; 5D 2/3

3/4 64-QAM

; 5C 1/2

3/4 16-QAM

-- 2-5 dB --

6

n

(601), n

0

(600)

(602a-602n).

(603a-603n).

(604a-604n),

(606).

(605).

가

COFDM

Ds) , 가 , (EEPROMs) : (ROMs) 가 (CD-ROMs) (DV

, , , , , - 가
.

(57)

1.

(102) :

(116a, 116b) , (116a, 116b) (112a, 112b)
, (112a, 112b)
12b) (116a, 116b) ;
(116a, 116b) (118) ;
(118) (120) , (102).

2.

1 , (116a, 116b)
(projected constellation symbols) ,
(102).

3.

1 , (116a, 116b) ,
(cumulative least squares) (countpart)
(102).

4.

3 , (116a, 116b)
1 0 , (102).

5.

1 , (coded orthogonal frequency divisi
on multiplexing) , (102).

6.

(100) :
(101) ;
(101) 가 (103) ;

(102) , (102) :

- , (116a, 116b) , (116a, 116b) (112a, 112b)
(116a, 116b) , (112a, 112b)
12b) (116a, 116b) ;

- (116a, 116b) (118) ;

- (118) (120) , (100).

7.

6 , (116a, 116b) ,
(100).

8.

6 , (116a, 116b) ,
(100).

9.

8 , (116a, 116b)
1 0 , (100).

10.

6 , (1
00).

11.

;
;
;
;

12.

11 , :
;

13.

11 , :
;
;

14.

13 , :
1 0
;

15.

11 :
;

16.

:
;
;

17.

16

18.

16

19.

18

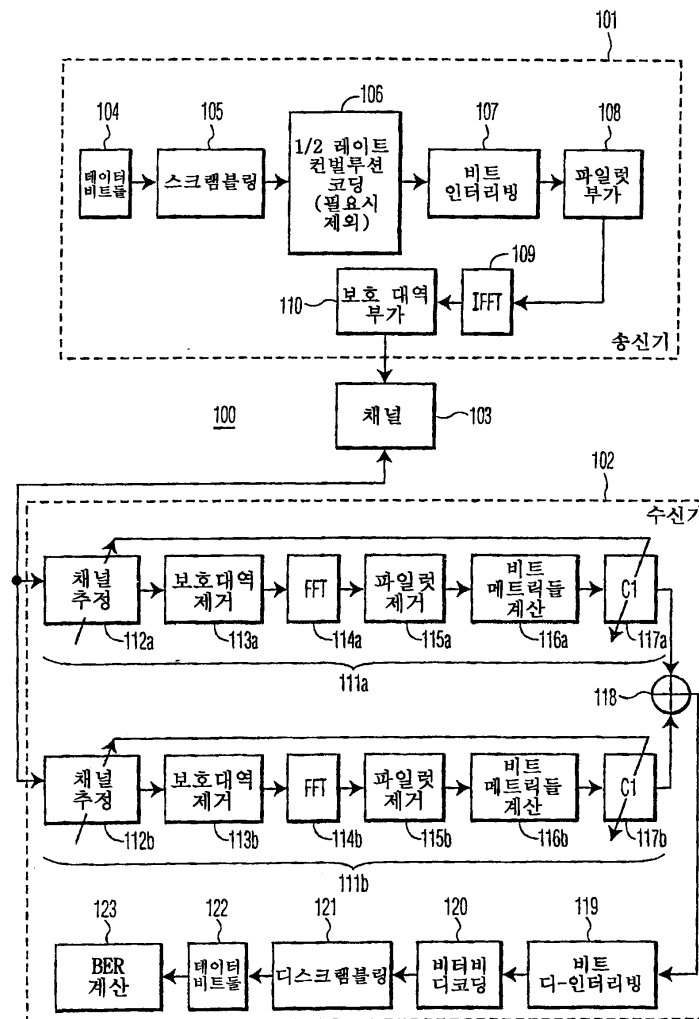
20.

16

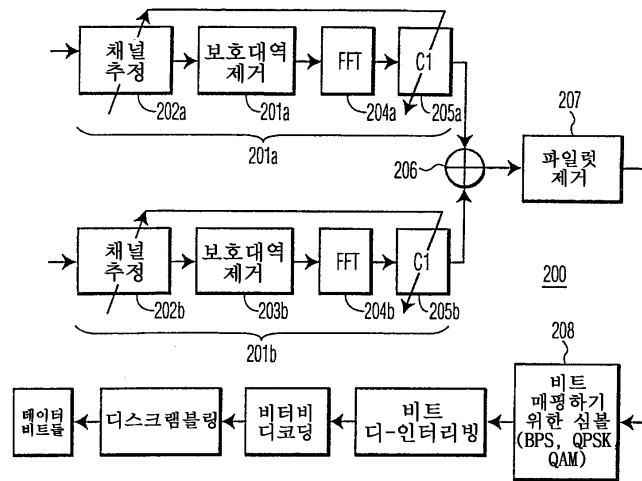
1

0

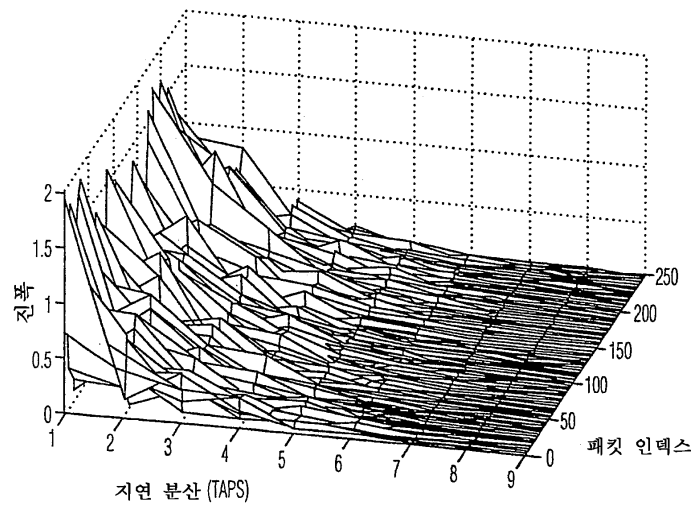
1



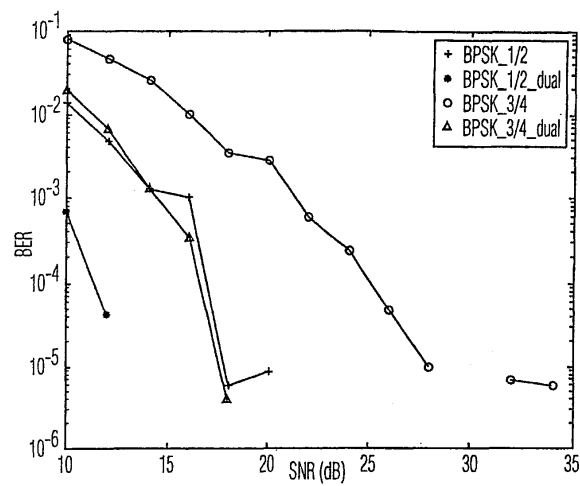
2

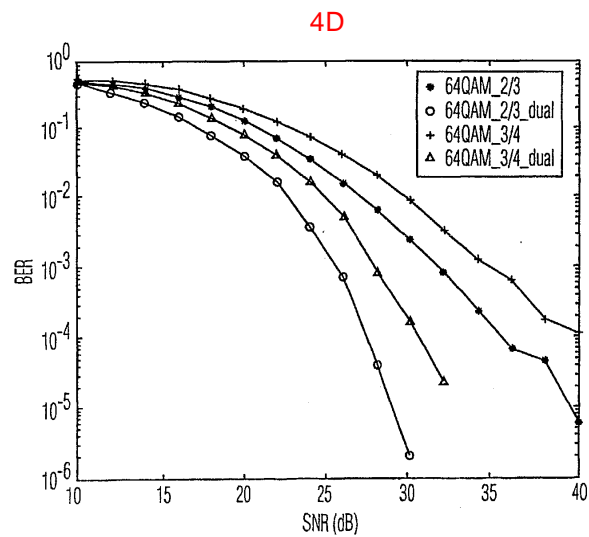
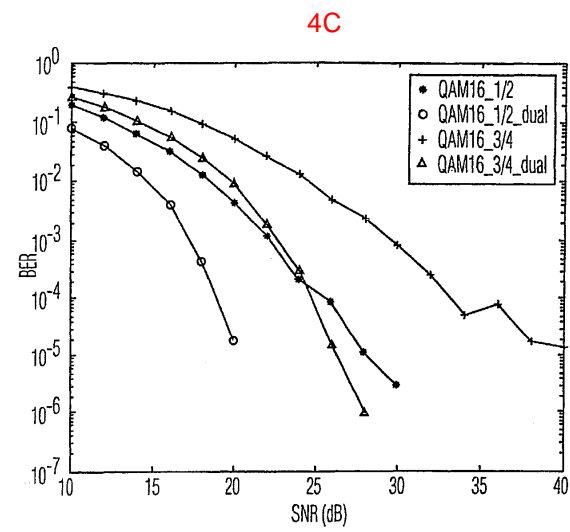
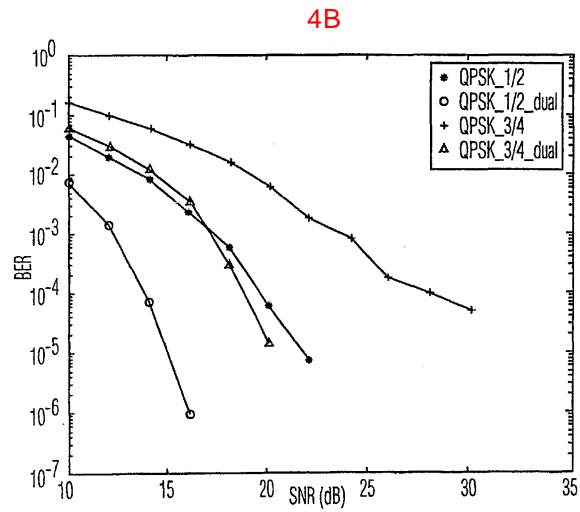


3

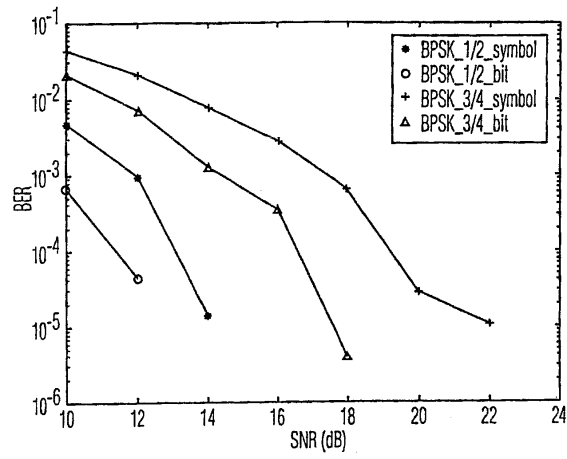


4A

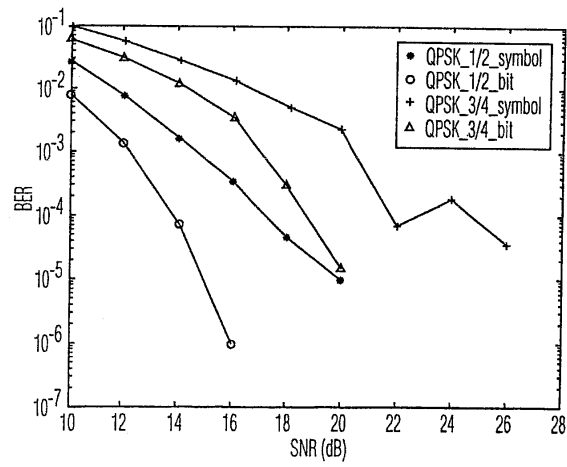




5A



5B



5C

