

(19)
(12)

(KR)
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H04L 23/02

(45)
(11)
(24)

2002 06 22
10 - 0326312
2002 02 15

(21)
(22)

10 - 1994 - 0013767
1994 06 17

(65)
(43)

1996 - 0003192
1996 01 26

(73)

3 416

(72)

104 - 1502

4 APT 601 - 1203

(74)

:

(54)

가

가

PN

PN

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PN

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1

2

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330: 468:

470: 472:

474: 476:

478:

PN(Pseudo Noise)

1 2

[illegible]

가 PN

PN

3

PN

PN

(302) ,

(304) ,

 D_{IN} PN

(306) ,

 f_{IF} PN

(OQPSK

: Offset Quadrature Phase Shift Keying)

(330) ,

 f_{RF}

(328)

(326)

3

(330) PN

(308) ,

PN

(310) , (310)

 f_{IF}

(312) ,

PN $1/2$

(314) ,

(316) ,

(318) ,

 f_{IF} 90°

(320) , (318)

(322) , (312,322)

(326) 가 가 (324)

4

(4

68) ,

PN

DCLK

(442) ,

(442)

PN

 PN_P

PN

 PN_E

PN

 PN_L

PN

(444) ,

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PN

 PN_E, PN_P, PN_L

(470) ,

(442)

PN

(472) ,

(474) ,

PN

 PN_L

(476) ,

(478) DCLK PN 1

4 (468) (404) BPF(406) A/D (408) , (470)
 (410,418,430) BPF(412,420,432) (414,422,434) (416,424,436) ,
 (472) (426) PN (428) (438) (440) , (474)
 (470)
 (446) , 90 ° (448) , (448)
 (446) (450) .

(476) PN PN_L (470)
 (452) , (450) (452) (454) .

(478) (456) , PN 1/2
 (458) , (458) (470)
 (460) , (454) (460) (462) , (4
 62) (464) , DCLK PN 1
 (466) .

3 4 PN (pilot)
 가 가 PN
 가 , AGC .

3 D_{IN} (106) PN
 (316) (318) . (314) 1/2 ,
 (zero crossing)가
 C 가 가 .
 PN (308) (310) . PN
 f_{IF} 가 (324) (326) f_{RF} (328)
 S_T (1) .

$$S_T = \{P(t)\cos(2\pi f_{IF})t + d(t - \frac{1}{2}Tc)W(t - \frac{1}{2}Tc)P(t - \frac{1}{2}Tc)\sin(2\pi f_{IF})t\}e^{j2\pi f_{RF}t} \quad \dots (1)$$

(1) P(t) PN , W(t) , d(t) .

4 (402) (404) f_{RF} 가 BPF(
 406) 가 . A/D (408) PN
 (444) PN PN_P, PN PN_E, PN PN_L (410,418,430)
 BPF(412,420,432) (414,422,434) (416,424,436) PN 1
 가 (426) (424) TH
 R PN . PN 가 (440)
 (442) PN (444) 가 , 가

BPF(420) , (1)
(2) .

$$S_T = P(t)\cos(2\pi f_{IF})t + d(t - \frac{1}{2}Tc)W(t - \frac{1}{2}Tc)P(t - \frac{1}{2}Tc)\sin(2\pi f_{IF})t \dots \dots (2)$$

(2) PN (444) 가 PN PNP (418)
(3) 가 .

$$S_T = \cos(2\pi f_{IF})t + d(t - \frac{1}{2}Tc)W(t - \frac{1}{2}Tc)P(t - \frac{1}{2}Tc)\sin(2\pi f_{IF})t \dots \dots (3)$$

(3) PN BPF(420) BPF(412,420,432) FIR(Finit
e Impulse Response) . BPF(412,420,432) (tap) 1/2

(448) (Hilbert) (3) , BPF(420)
(1) (446) 90 ° 90 ° (450) (448)
(452,460) PN (456) (458) 1/2 BPF(420) 1/2
66) (462) (464) (4

PN PN

가 가

C

(57)

1.

PN PN ,

PN ,

PN

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2.

1 ,

PN

(308) ,

PN

(312) ,

(316) ,

90 °

(320) ,

(322) ,

(312,322)

가 가 (324)

3.

PN

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(448) ,

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(448)가

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(454)

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(454)

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(308) ,

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(312) ,

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(316) ,

90 °

(320) ,

(322) ,

(312,322)

가 가 (324)

10.

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(446) ,

90 °

(448) .

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(446)

(450)

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(452) ,

(450)

(452)

(454)

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12.

11

PN 1/2 (458) ,

(458)

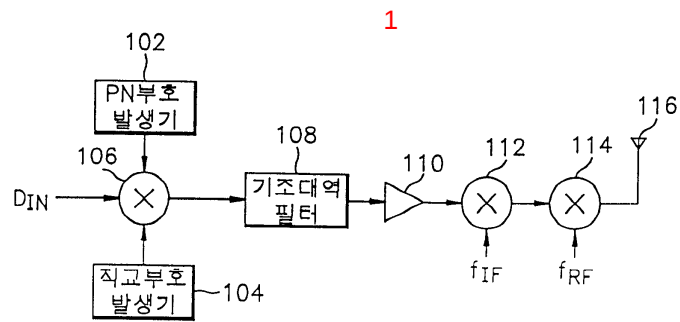
(460) ,

(454) (460) (462) ,

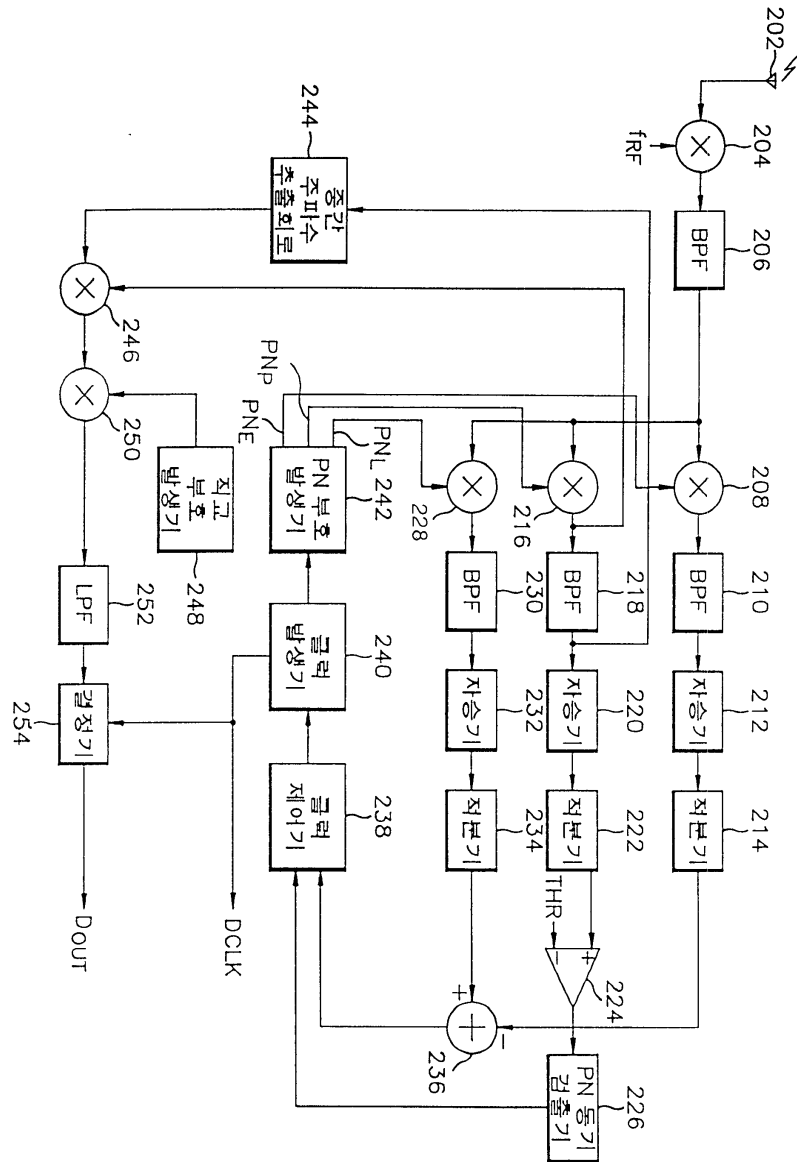
(462) (464) ,

PN 1

(466)



2



3

