

(19) (KR)  
(12) (A)

(51) 。 Int. Cl. <sup>7</sup> (11) 2002 - 0042436  
H04L 12/20 (43) 2002 06 05

(21) 10 - 2001 - 0073294  
(22) 2001 11 23

(30) 09/725438 2000 11 29 (US)  
(71) 600 ( : 07974 - 0636)  
(72) , 08857, , 26  
, 07726, , 22  
, 08510, , 34  
(74) :

(54)

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1

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100 :

09/725392 " (Sub - Pac  
ket Adaptation In A Wireless Communication System)"

3G - 1x EVDO 3 CDMA  
(Data Only Evolution) ,  
(separate forward links)  
가 (pilot signal) SIR 가  
SIR  
2 12 dB - 2 dB ,  
2.4 Mb/s SIR 38.4 Kb/s

가 , 3G - 1x EVDO 가 , 가 SIR  
3G - 1x EVDO (fast rate adaptation mechanism)  
SIR ,

가 가

ACK/NACK  
(acknowledgement) ACK  
(negative acknowledgement) NACK ACK/NACK n+j  
ACK/NACK 가 , ACK/NACK j

ACK가

NACK가  
NACK  
가 가  
n+j+k  
k

(FER; frame error rate)

가

1

1

2

2

2

(100)

(110)

1

(rate indication messag

e)

(115)

(120)

가

(120)

(120)

가 , (120) (140)  
 , ARQ  
 , ARQ( )  
 , " "

가 19.2 Kb/s

76.8 Kb/s

가

, 4

, 1

가 38.4 Kb/s

1,536

가

153.6 Kb/s

( )

[ 1 ]

	7,680	3,072	1,536	768
Kb/s	Kb/s	Kb/s	Kb/s	Kb/s
9.6	38.4	38.4	38.4	38.4
19.2	76.8	76.8	76.8	76.8
38.4	153.6	153.6	153.6	153.6
76.8	307.2	307.2	307.2	307.2
153.6	614.4	614.4	614.4	614.4
307.6	877.7	819.2	614.4	614.4
614.4	1228.8	1228.8	1228.8	614.4
819.2	1536.0	1228.8	1228.8	614.4
1228.8	2048.0	2457.6	1228.8	614.4
1536.0	3072.0	2457.6	1228.8	614.4
2048.0	3072.0	2457.6	1228.8	614.4
2457.6	3072.0	2457.6	1228.8	614.4

(125) , ACK/NACK 가 ACK , (130)  
 , (100) (110) 가 NACK , (135) ,  
 가, NACK가 , (120)

(140) , (135) 2  
 - (120) , - 2

, (120, 140) - , (120, 140)  
 , -

, ACK/NACK 가 ACK NACK ,  
 (100) (125) (110) ,  
 가 가

, - (120, 140)  
 ARQ , -  
 , 2 - , -  
 (100) (210) ,  
 ,  
 ( 1 ). ,

(215) , - ,  
 , -  
 (puncturing) / -

3 - (30) , 3,072  
 1/5 15,360 , 가 -

구분	2024년	2023년	2022년
1. 영업활동에 의한 현금흐름	15,360	13,824	12,288
2. 투자활동에 의한 현금흐름	24,576	12,288	13,824
3. 재무활동에 의한 현금흐름	12,288	13,824	6,144
4. 기타	-	-	-
합계	52,224	39,936	32,256

13,824  
819.2 Kb/s ; 24,576  
38.4 Kb/s, 76.8  
153.6 Kb/s, 307.2 Kb/s ; 6,144  
245  
7.6 Kb/s 가 153.6 Kb/s , -  
24,576  
3 8 - , 8  
가

(225) , - .  
- .  
(  
가 307.2 Kb/s  
QPSK가 .

( )

[ 2 ]

9.6	QPSK
19.2	QPSK
38.4	QPSK
76.8	QPSK
153.6	QPSK
307.2	QPSK
614.4	QPSK
819.2	8 - PSK
1228.8	QPSK/16 - QAM
1536.0	16 - QAM
2048.0	16 - QAM
2457.6	16 - QAM
3072.2	16 - QAM

- ) (

( )

[ 3 ]

7,680		3,072		1,536		768	
38.4	160	38.4	64	38.4	32	38.4	16
76.8	80	76.8	32	76.8	16	76.8	8
153.6	40	153.6	16	153.6	8	153.6	4
307.2	20	307.2	8	307.2	4	307.2	2
614.4	10	614.4	4	614.4	2	614.4	1
877.7	7	819.2	3	614.4	2	614.4	1
1228.8	5	1228.8	2	1228.8	1	614.4	1
1536.0	4	1228.8	2	1228.8	1	614.4	1
2048.0	3	2457.6	1	1228.8	1	614.4	1
3072.0	2	2457.6	1	1228.8	1	614.4	1
3072.0	2	2457.6	1	1228.8	1	614.4	1
3072.0	2	2457.6	1	1228.8	1	614.4	1

3,072 가 , 가 , 가

가 , 가

(57)

1.

1 1 ,

1 1 ,

1 2 , 2

2 2 , 2 1

2.

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1 2 ,

3.

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1 2 ,

4.

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1 가 , 1

5.

1 ,

1 2 가 ,

6.

1 ,

1 ,

7.

1 ,

2 ,



8.

1 ,  
1 ,  
가 , .

9.

8 ,  
가 , .

10.

9 ,  
가 ,  
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11.

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1 , 2  
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2 , 2 , 2  
 , 2 , .

12.

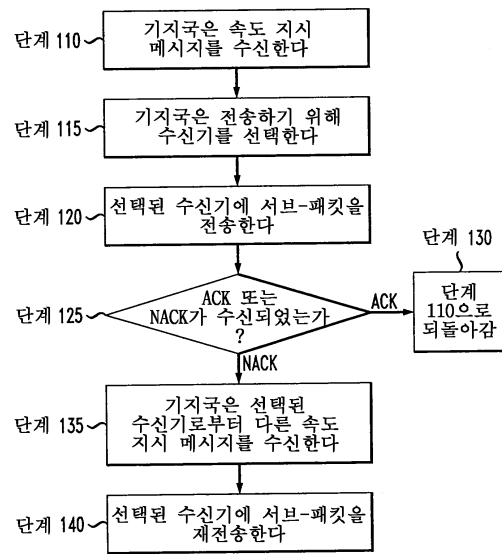
11 ,  
1 , 1  
가 , .

13.

12 ,  
1 2 가 ,  
.

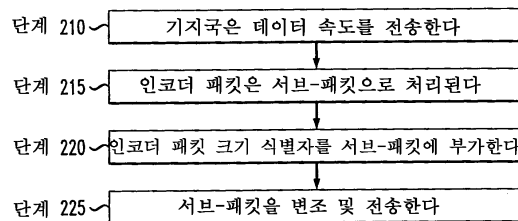
100

1



2

200



3

30

