

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
28 February 2008 (28.02.2008)

PCT

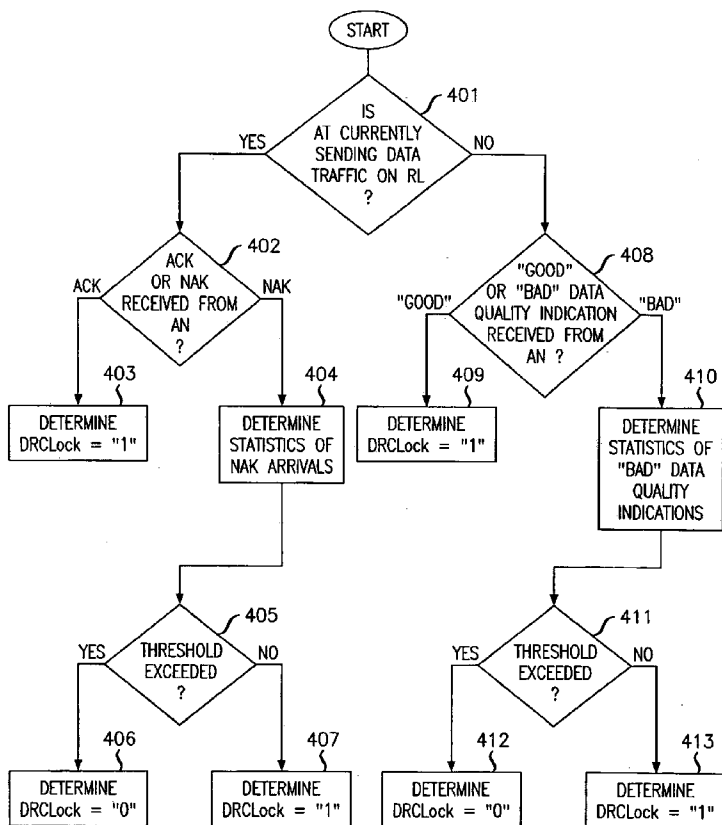
(10) International Publication Number  
WO 2008/024286 A3

- (51) International Patent Classification:  
H04L 1/00 (2006.01)
- (21) International Application Number:  
PCT/US2007/018291
- (22) International Filing Date: 17 August 2007 (17.08.2007)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
11/509,406 24 August 2006 (24.08.2006) US
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- (81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH,  
CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG,  
ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL,  
IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK,  
LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW,  
MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,  
PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY,  
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA,  
ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,

[Continued on next page]

(54) Title: METHOD OF INCREASING THE CAPACITY OF THE FORWARD LINK MAC CHANNEL IN A WIRELESS COMMUNICATION SYSTEM



(57) Abstract: In an H-ARQ system, when the AN is receiving packet data traffic on the RL from an AT and is generating ACKs and NAKs according to the ability of the AN to properly decode such data, the AN gates-off a DRCLock bit within in a sub-packet duration in which an ACK is transmitted on the FL MAC channel. When it receives an ACK, the AT ignores the non-transmitted DRCLock bit in a current sub-packet duration, and assumes that the DRC channel is "good". When the AN sends a NAK to the AT, it also sends the DRCLock bit. When the AT receives a NAK in a sub-packet duration, it reads and processes whatever DRCLock bit is received during that sub-packet duration. When no data traffic is transmitted on the RL traffic channel, corresponding DRCLock bits are not gated-off by the AN and are transmitted to the AT. The AT then processes the received DRCLock bits. In an alternative embodiment, transmission of DRCLock is totally eliminated.

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PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments*

**Published:**

— *with international search report*

**(88) Date of publication of the international search report:**

24 April 2008

**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/US2007/018291

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. H04L1/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2004/266466 A1 (KIM KI JUN [KR] ET AL) 30 December 2004 (2004-12-30)	1-8
X	-----	9,10
P,X	WO 2007/078160 A (LG ELECTRONICS INC [KR]; KIM SANG GOOK [US]; YOON YOUNG CHEUL [US]; WA) 12 July 2007 (2007-07-12) figures 2-5 -----	9,10

Further documents are listed in the continuation of Box C.

See patent family annex.

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- \*&\* document member of the same patent family

Date of the actual completion of the international search

15 February 2008

Date of mailing of the international search report

25/02/2008

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/018291

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2004266466 A1	30-12-2004	CN 1551552 A KR 20040096748 A	01-12-2004 17-11-2004
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