Title: APPARATUS AND METHOD FOR CHANNEL ENCODING AND DECODING IN COMMUNICATION SYSTEM USING LOW-DENSITY PARITY-CHECK CODES

Abstract: An apparatus and a method for channel encoding/decoding in a communication system are provided. The apparatus and the method generate LDPC-encoded blocks with various lengths from an LDPC codeword with fixed length in a communication system using a Low-Density Parity-Check (LDPC) code. The apparatus and the method perform shortening using a predetermined number of shortened bits and perform LDPC encoding. The apparatus and the method apply predetermined rules according to the predetermined number of shortened bits and determine the number of bits to be punctured, and perform puncturing based on the determined number of punctured bits.

Diagram: [Fig. 8]
Published:
— with international search report (Art. 21(3))

before the expiration of the time limit for amending the search report: 
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INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

H03M 13/11(2006.01)i, H03M 13/00(2006.01)i

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)

IPC H03M

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

Korean Utility models and applications for Utility models since 1975
Japanese Utility models and applications for Utility models since 1975

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

eKOMPASS(KIPO internal) & keywords LDPC, shortening, puncturing

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<th>Relevant to claim No</th>
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Further documents are listed in the continuation of Box C

See patent family annex

Date of the actual completion of the international search
23 OCTOBER 2009 (23 10 2009)

Date of mailing of the international search report
23 OCTOBER 2009 (23.10.2009)

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Korean Intellectual Property Office
Government Complex-Daejeon, 139 Seonsa-ro, Seogu, Daejeon 302-701, Republic of Korea
Facsimile No 82-42-472-7140

Authorized officer
Kwon, Sung Lark
Telephone No 82-42-481-5646

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