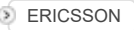
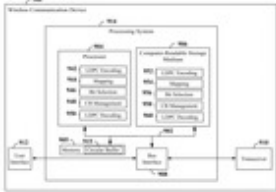
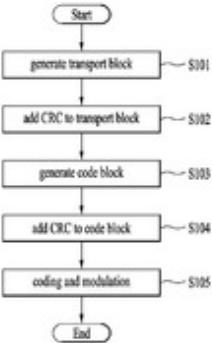
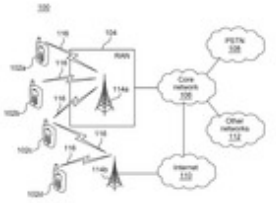
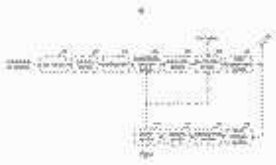
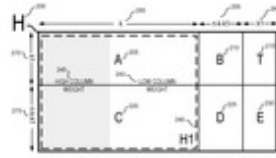
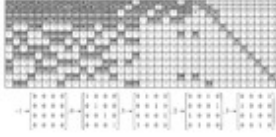


Patent families - 24 results

#	  Title	Publication number	Publ. date	Applicant/Assignee			
1.	Rate matching methods for ldpc codes	EP3308469	2018-04-18		100 %		
A method of producing a set of coded bits from a set of information bits for transmission between a first node (110, 115) and a second node (110, 115) in a wireless communications system (100), the method comprises generating (904) a codeword vector by encoding the set of information bits with a low-density parity-check code, wherein the codeword vector is composed of systematic bits and parity bits. The method comprises performing (908) circular buffer-based rate matching on the generated codeword vector to produce the coded bits for transmission, wherein the circular buffer-based rate matching comprises puncturing a first plurality of systematic bits.							
2.	Location of interleaver with ldpc code	EP3571795	2019-11-27		87 %		
Concepts and schemes pertaining to location of interleaver with low-density parity-check (LDPC) code are described. A processor of an apparatus encodes data to provide a stream of encoded data. The processor also rate matches the encoded data to provide a rate-matched stream of encoded data. The processor further interleaving the rate-matched stream of encoded data. In rate matching the encoded data, the processor buffers the stream of encoded data in a circular buffer, with the circular buffer functioning as a rate matching block that rate matches the stream of encoded data. In interleaving the rate-matched stream of encoded data, the processor performs bit-level interleaving on the rate-matched stream of encoded data to provide a stream of interleaved data.							
3.	Low density parity check (ldpc) circular buffer rate matching	EP3580851	2019-12-18	 	85 %		
Aspects of the present disclosure relate to low density parity check (LDPC) coding utilizing a configurable circular buffer for rate matched transmissions such as IR-HARQ transmission. The circular buffer may be configured based on a selected mother code rate and a fixed circular buffer length. For example, the respective sizes of the systematic and parity bit sections of the circular buffer may be variable based on the selected mother code rate.							
4.	Qc ldpc code rate matching method and device therefor	EP3522378	2019-08-07	 	79 %		
A quasi-cyclic low-density parity check (QC LDPC) code rate matching method is disclosed. According to the rate matching method in the present disclosure, the minimum lifting value can be selected from among lifting values by which a codeword longer than a target code block can be generated. A coding gain through retransmission can be acquired by generating the codeword that is longer than the target code block. In addition, by selecting a lifting value of a proper magnitude, rate matching for information bit sequences of various lengths can be performed.							

5.	Protograph based low-density parity check (ldpc) codes in combination with harq	EP3497794	2019-06-19	IDAC HOLDINGS IDAC	76 %	
6.	Radio communication apparatus and interleaving method	WO2009/094805	2009-08-06	PANASONIC	76 %	
7.	Self-decodable retransmission for ldpc code based harq systems	WO2019/032881	2019-02-14	QUALCOMM	74 %	
8.	Efficient ldpc encoder for irregular code	US20170104499	2017-04-13	SK HYNIX	71 %	
9.	Information processing method and apparatus, communication device, and communication system	EP3540998	2019-09-18	HUAWEI	71 %	

10. [Data processing method, data processing device and decoder](#) CN106911337

2017-06-30

SHENZHEN YI LIAN INFORMATION SYSTEM

69 %

The invention relates to a data processing method, a data processing device and a decoder. The method comprises the following steps of: obtaining data to be decoded; according to the bandwidth of the decoder, dividing the data to be decoded into n data blocks; and, according to a first check matrix, simultaneously decoding the n data blocks, wherein the first check matrix is a matrix obtained by row-column transformation of an original check matrix according to the value of n ; the first check matrix includes n circular permutation matrixes; and furthermore non-zero sub-matrixes in the original check matrix are distributed in the n circular permutation matrixes according to the pre-set distribution standard. The data to be decoded is divided into multiple proper data blocks, which are simultaneously decided; the one-time iteration completing time is reduced; and the bandwidth of the decoder is increased.

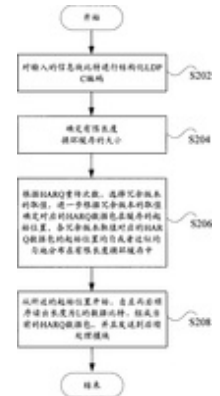
11. [Speed matching method of limited length circular buffer of ldpc code](#) CN101188428

2008-05-28

ZTE

69 %

The invention discloses a speed matching method of the limited-length circular cache of a low-density **parity**-check code. The method includes the following steps of conducting a structured low-density **parity**-check code encoding on the data bit of an inputted information block, and determining the size of the one-dimensional limited-length circular cache according to the encoding result; selecting a redundant version value from a plurality of preset redundant version values according to the retransmission times of the mixed retransmission request, and determining the initial position of the data bit of the formed mixed retransmission request data packet read from the one-dimensional limited-length circular cache according to the selected redundant version value; and reading the mixed automatic retransmission request data packet composed of specific-length data from the initial position in order, and sending the mixed automatic retransmission request data packet out. The respective corresponding initial positions of the multiple preset redundant version values are evenly or almost evenly distributed on the one-dimensional limited-length circular cache.

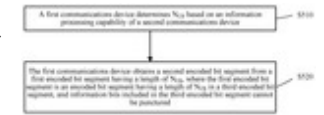
12. [Data processing method and communication device](#) EP3570471

2019-11-20

HUAWEI

68 %

Provided by the present application are a data processing method and a communication device. The data processing method comprises: a first communication device determines that NCB and NCB are determined according to NCB,max, NIR, KW and C, wherein NCB,max is the maximum coding code block size supported by a decoder of a second communication device, NIR is the soft information cache size of the second communication device, KW is the circular cache size of the first communication device, and C is the number of code blocks in a transmission block when the first communication devices sends information to the second communication device; and the first communication device acquires a second coded bit segment from a first coded bit segment having a length of NCB. The data processing method and the communication device provided by the present application may reduce the decoding complexity of the communication device and improve reliability of communication.

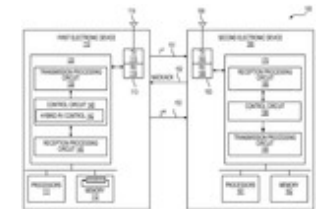
13. [Method and apparatus for communication](#) EP3566351

2019-11-13

MEDIATEK

68 %

Aspects of the disclosure provide an apparatus that includes transmitting circuit and processing circuit. The transmitting circuitry is configured to transmit wireless signals. The processing circuitry is configured to encode a set of information bits with a code that is configured for incremental redundancy to generate a code word that includes the information bits and **parity** bits, buffer the code word in a circular buffer, determine a start position in the circular buffer based on a redundancy version that is selected from a plurality of redundancy versions based on a scenario evaluation of a previous transmission associated with the set of information bits, and transmit, via the transmitting circuitry, a selected portion of the code word from the start position.

14. [Data processing method and device](#) EP3573270

2019-11-27

HUAWEI

68 %

Disclosed in the embodiments of the present application are a data processing method and a data processing device. The method comprises: acquiring a first bit sequence to be processed, the first bit sequence to be processed being a transmission block or a code block generated by the transmission block after undergoing code block segmentation; encoding the first bit sequence to be processed to obtain a first encoded bit sequence; saving all of or at least part of the first encoded bit sequence into a circular cache; and extracting a first output bit sequence from the bits saved in the circular cache. By using the method and device provided by the present application, rate matching of sequences generated by low density **parity** check (LDPC) coding may be achieved.

