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Mazzoni et al.

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(54) **DEVICE FOR SENDING/RECEIVING DIGITAL DATA CAPABLE OF PROCESSING DIFFERENT BIT RATES, IN PARTICULAR IN A VDSL ENVIRONMENT**

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(2), (4) Date: **Jul. 16, 2002**

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H04B 1/38 (2006.01)
H04L 5/16 (2006.01)

(52) **U.S. Cl.** **375/219**

(58) **Field of Classification Search** **375/219,**
375/222, 259, 377; 714/701, 702, 761, 762,
714/763

See application file for complete search history.

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(57) **ABSTRACT**

A device for sending/receiving digital data is capable of processing different bit rates from a group of predetermined bit rates. The device may include a channel coding/decoding stage including an interleaver, a deinterleaver, and a memory whose minimum size is fixed as a function of the maximum bit rate of the group of predetermined bit rates. The memory may have a first memory space assigned to the interleaver and a second memory space assigned to the deinterleaver. The size of each of the two memory spaces may be set as a function of the bit rate actually processed by the device.

15 Claims, 7 Drawing Sheets

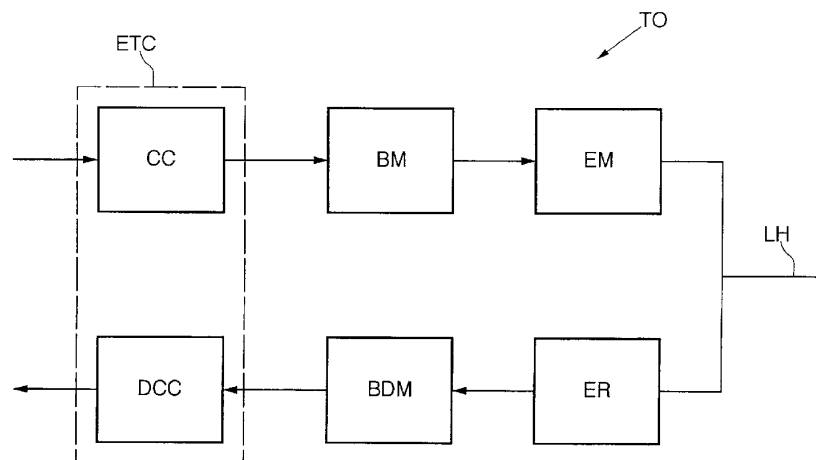
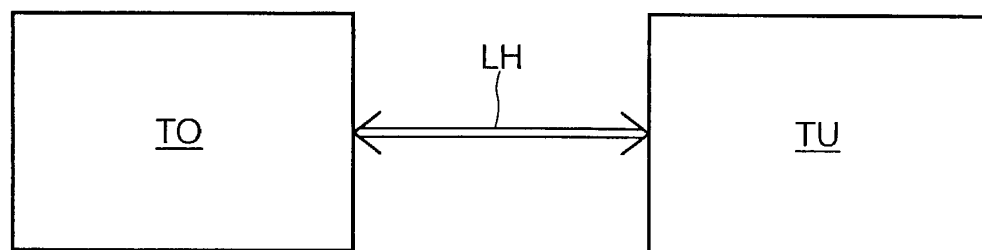


FIG.1



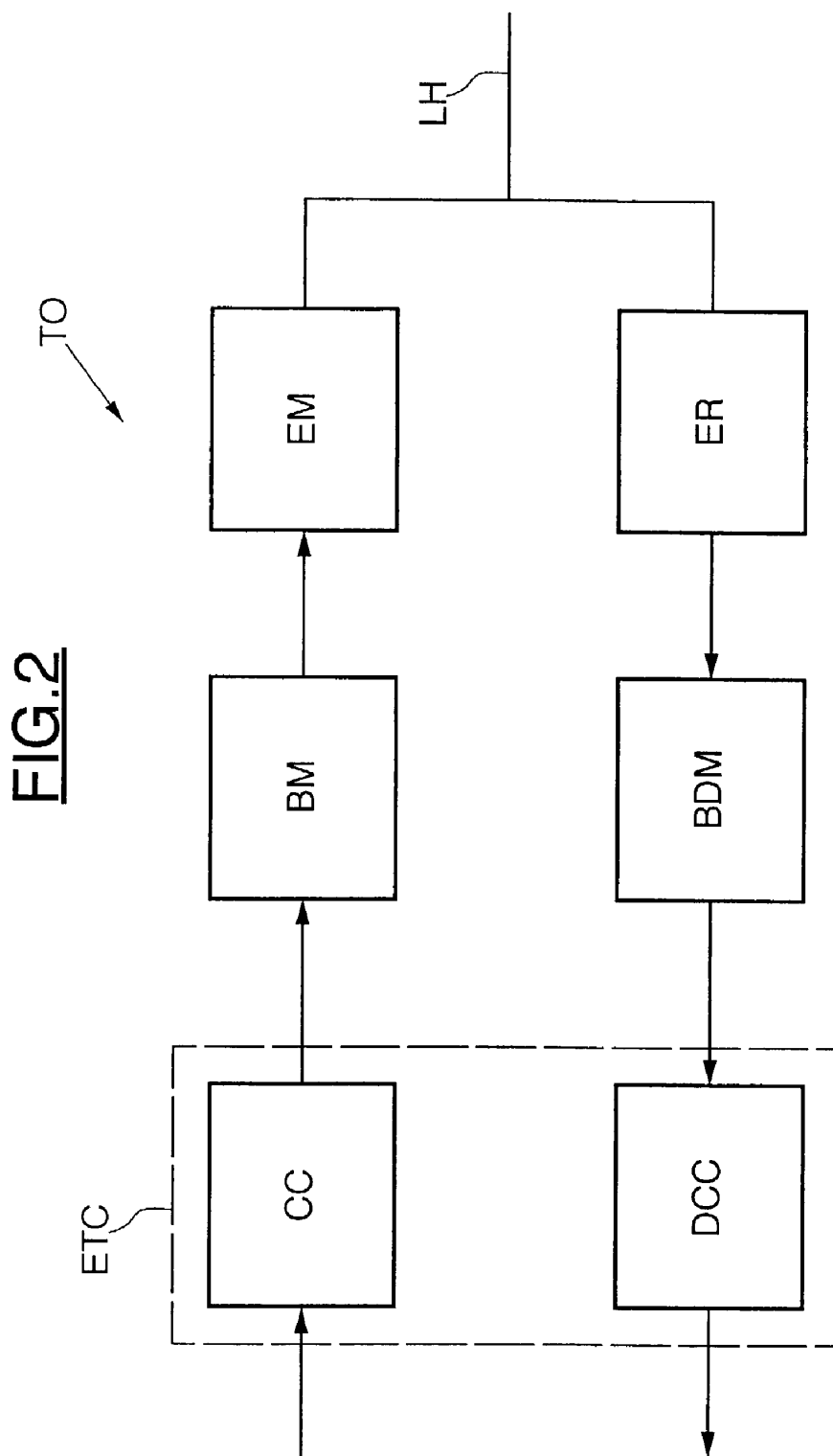


FIG.3

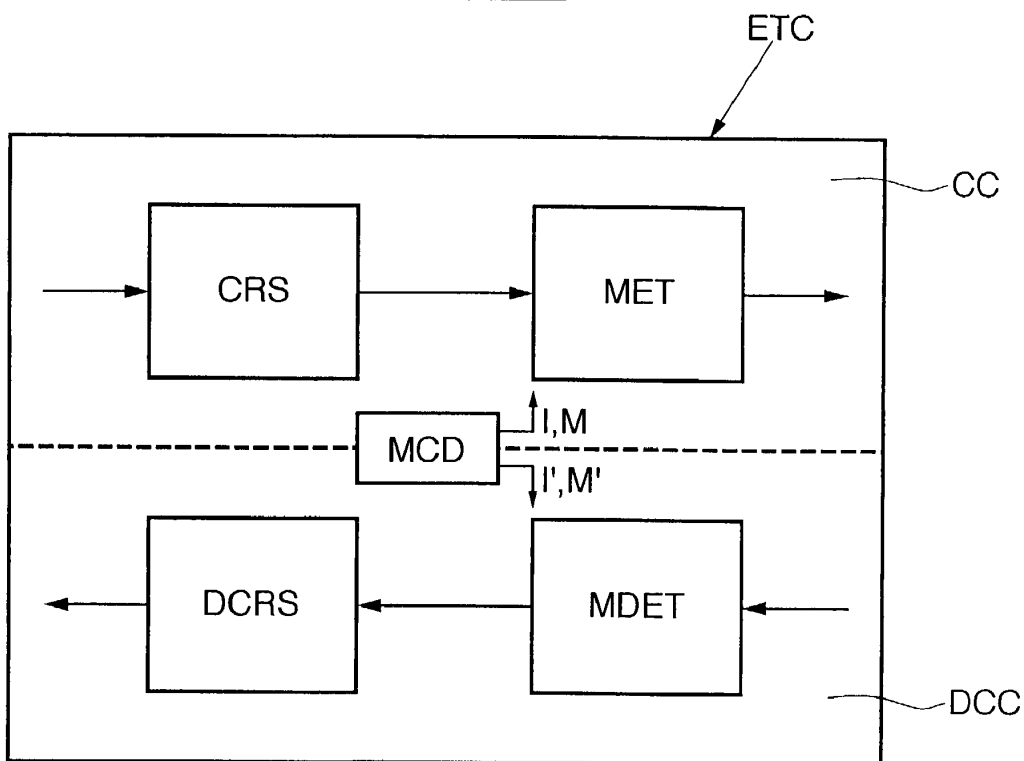


FIG. 5

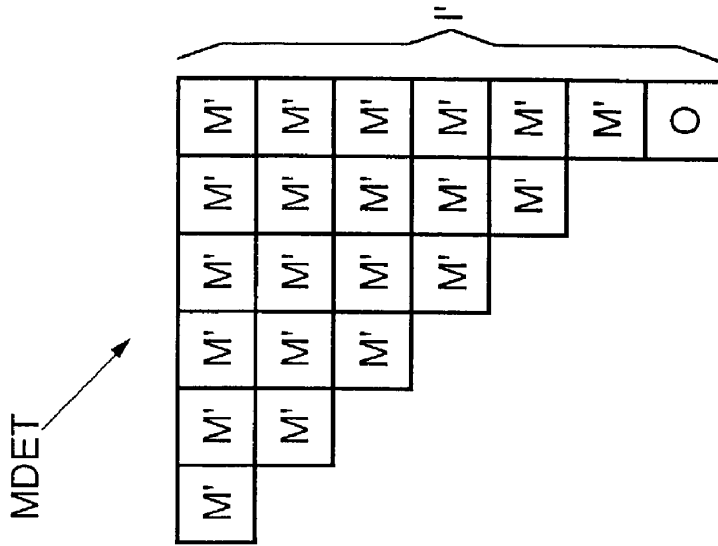
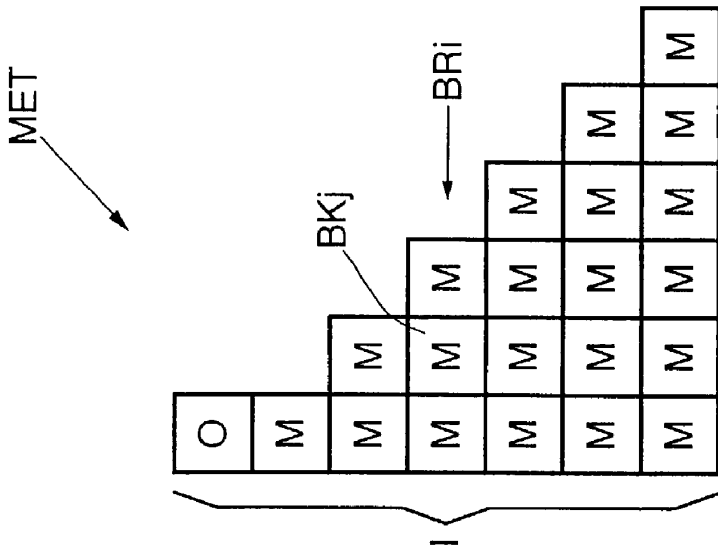


FIG. 4



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