

ABSTRACT

METHOD AND APPARATUS FOR ENCODING LEMPEL-ZIV 1 VARIANTS

A method for encoding an input data stream of source symbols to produce an output sequence of pointers is disclosed. A LITERAL string in an input data stream is first loaded into a history-buffer. A value of a history-buffer pointer is copied to a register to indicate a starting position of the LITERAL string within the history-buffer. A counter is incremented for each subsequent LITERAL symbol from the input data stream. Then, the LITERAL string and each subsequent LITERAL symbol from the input data stream is encoded utilizing a value within the register and a value within the counter as a LITERAL_POINTER. Finally, the LITERAL_POINTER is outputted from a data compressor.

Fig. 1b