



162162

17 APR 2002

- 14 -



G00002

ABSTRACT**AN ENCODING/DECODING DEVICE FOR GENERATING A RUN LENGTH
LIMITED AND DC-FREE DATA SEQUENCE**

A device for encoding a sequence of data words of a binary source signal into a run length limited sequence that satisfies the constraints of (d,k) wherein $d=1$, $k=7$ and the code rate is $2/3$, wherein the bit stream of the source signal is divided into n-bit source words. The device includes means for converting the source words into corresponding m-bit channel words, such that the conversion is parity preserving and includes means for inserting a DC control bit into the sequence of data words, such that the encoded sequence is DC free. A decoding device for decoding the channel signal obtained by means of the encoding device is also disclosed.

(Figure 1)