

Abstract

The present invention is directed to a method for improving the forward error correction in serial coding in a data transmission in a vehicle and creates, among other things, the advantage over the prior art that the physical behavior on a transmission channel can always
5 be deterministically controlled despite a reduction in the resource requirements. Thus, according to the proposed method, the bit errors are minimal and a transmission error can be corrected efficiently, i.e. with minimal technical effort. In addition, the encoders used are designed with a minimum number of gates and an interleaving is implicit in the proposed method, which is based on the fact that so-called burst errors can be corrected particularly
10 advantageously. This implicit interleaving makes it possible to dispense with the conventional buffer memory required for explicit interleaving. In addition, the invention ensures that user data together with correcting metadata can be encoded advantageously with regard to transmission. According to the invention, it can be ensured that not only the user data is line-coded or line-encoded, but also the correction data. The present invention is
15 also directed to an analogously designed system arrangement for carrying out the method and to a computer program product with control commands which carry out the method.

Figure 4