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(54) **DIGITAL ISOLATOR AND DIGITAL SIGNAL TRANSMISSION METHOD**

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(57) **ABSTRACT**

A digital isolator can include: an encoding circuit configured to receive and encode an input digital signal, in order to generate an encoded signal, wherein a rising edge of the input digital signal is encoded as a first pulse sequence, and a falling edge of the input digital signal is encoded as a second pulse sequence; an isolation element coupled to the encoding circuit, and being configured to transmit the encoded signal in an electrically isolated manner; and a decoding circuit configured to receive the encoded signal through the isolation element, and to decode the encoded signal, in order to generate an output digital signal consistent with the input digital signal.

