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

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(57) **ABSTRACT**

A digital isolator can include: an encoding circuit configured to receive an input digital signal, and to encode a rising edge and a falling edge of the input digital signal into different encoded signals; an isolating element coupled to the encoding circuit, and being configured to transmit the encoded signal in an electrical isolation manner; and a decoding circuit configured to receive the encoded signal through the isolating element, and to decode the encoded signal to obtain the rising edge and the falling edge, in order to output an output digital signal consistent with the input digital signal.

