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(54) **DATA COMMUNICATION METHOD, APPARATUS, AND SYSTEM**

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(57) **ABSTRACT**

A data communication method includes: processing to-be-transmitted target secret information by using a preset secret sharing algorithm to obtain a plurality of secret fragments; and distributing the plurality of secret fragments to each relay node in a first relay node layer among preset M relay node layers to transmit the plurality of secret fragments to a receiving device by means of each relay node in the M relay node layers, so that the receiving device can obtain the target secret information based on each received secret fragment under the condition that the number of the received secret fragments is greater than or equal to a preset security threshold. By applying the data communication method, in the case that the number of breached relay nodes does not exceed the preset security threshold, an attacker cannot obtain a sufficient number of secret fragments to crack the target secret information.