

ABSTRACT

Embodiments of this application disclose data processing methods and apparatuses based on a blockchain, an electronic device, a computer-readable storage medium, and a computer program product. The method includes the following operations. A first device generates a first bit array corresponding to the first service data; encrypts the first bit array through a data key to obtain a ciphertext bit array, the data key being generated by a second device in a data intersection application, and the data intersection application being run in a trusted execution environment a; and transmits the ciphertext bit array to a blockchain node to enable the blockchain node to forward the ciphertext bit array to the second device. The second device decrypts, in the data intersection application through the data key, the ciphertext bit array to obtain the first bit array. The second device generates a second bit array corresponding to second service data. The second device determines service intersection data between the first service data and the second service data and performs service processing related to the service intersection data.

Fig. 3