

DIFFERENTIAL PRIVACY-BASED SERVICE ANALYSIS METHOD AND APPARATUS

ABSTRACT

This specification provides differential privacy-based service analysis methods and apparatuses.

- 5 According to the methods, the methods include at least one service analysis stage, and any service analysis stage includes at least one round of operations. An n^{th} round of operations of the service analysis stage include the following steps: obtaining target data, where the target data are obtained by performing anonymization processing on to-be-processed data; performing predetermined service analysis on the target data; and if the service analysis succeeds, ending the service analysis stage; or
- 10 if the service analysis fails, determining an $(n+1)^{\text{th}}$ round of privacy budget, and sending the $(n+1)^{\text{th}}$ round of privacy budget to the multiple user devices. As such, in a process of performing differential privacy processing on data, a privacy budget can be adaptively adjusted to enhance flexibility of a privacy protection process and improving availability of privacy protection data.

15 [FIG. 2]