

ABSTRACT

Data Secrecy Statistical Processing System, Server Device For Presenting Statistical Processing Result, Data Input Device, And Program And Method Therefor

A result of statistical processing for a set of original data items can be obtained while the risk of leakage of information to be hidden is reduced by avoiding transferring and storing original data.

Each of a plurality of data input devices comprises: means for acquiring an original data item to be hidden; and means for dividing the original data item in accordance with a secret ratio where adding up all the partial data items restores the original data item, and outputting a predetermined number of partial data items. Each of a predetermined number of arithmetic devices comprises means for performing a predetermined arithmetic operation based on a plurality of input data items, performs the arithmetic operation using partial data items as the input data items, each partial data item being outputted from each of a plurality of data input devices, and outputs the arithmetic result. A data processing device performs a service that uses the arithmetic result outputted from each of a predetermined number of arithmetic devices, thereby obtaining and providing a statistical processing result based on a plurality of original data items acquired by the plurality of data input devices without acquiring the original data items.

Fig. 1