

ABSTRACT

A computer-implemented method for information protection comprises: determining one or more data inputs and one or more data outputs for a transaction, wherein the data inputs are associated with input data types respectively, and the data outputs are associated with output data types respectively; encrypting the input data types and the output data types; committing each of the encrypted input data types and the encrypted output data types with a commitment scheme to obtain corresponding commitment values; obtaining at least a parameter R based at least on the commitment values; and submitting the transaction to one or more nodes in a blockchain network with disclosure of the parameter R and without disclosure of the input data types and output data types for the nodes to verify consistency between the input data types and the output data types.