

Abstract

METHODS AND APPARATUS FOR EFFICIENTLY IMPLEMENTING A DISTRIBUTED DATABASE WITHIN A NETWORK

An apparatus includes a processor and a memory operatively coupled to the processor and associated with an instance of a distributed database at a first compute device. The processor is configured to select an anonymous communication path. Each blinded public key from a sequence of blinded public keys associated with the anonymous communication path is associated with a pseudonym of a compute device from a set of compute devices that implement the anonymous communication path. The processor is configured to generate an encrypted message encrypted with a first blinded public key. The processor is configured to generate an encrypted data packet including the encrypted message and a compute device identifier associated with a second compute device. The encrypted data packet is encrypted with a second blinded public key. The processor is configured to send the encrypted data packet to a third compute device.

(Figure 1)