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ABSTRACT

A method and system for encrypted messaging includes first and second client devices and a quantum key device having a quantum random number generator. The generator provides a first quantum random signal, and the key device provides a symmetric first master key from the first quantum random signal. The master key is transmitted to the first client device and stored. The key device uses the master key to generate an encrypted package by encrypting one of a plurality of keys. The key device generates a second encrypted package. The first pairing key is provided to the first client device by decrypting the first encrypted package using the first master key and providing the first pairing key in the second client device by decrypting the second encrypted package using the second master key to establish an encrypted connection between the first and second client devices.

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