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(54) Title: QUANTUM KEY GENERATION METHOD AND SYSTEM

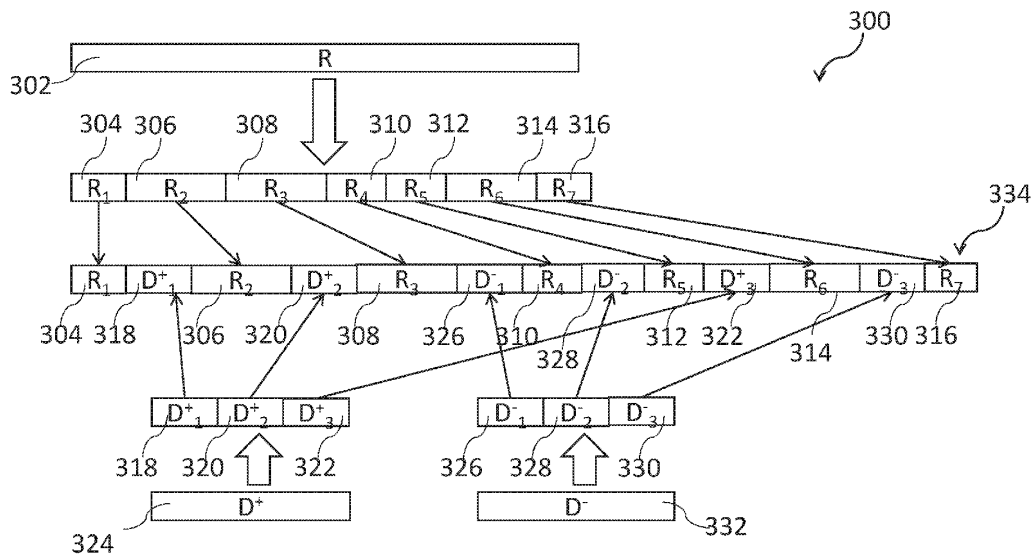


Fig. 5a

(57) Abstract: A quantum key generation method is disclosed herein. In a specific embodiment, the method comprises receiving a quantum transmission from a quantum transmission device 208, 508, 510, 520, the quantum transmission including quantum bits for obtaining a quantum key, detecting the quantum bits from the quantum transmission to obtain a detected bit-sequence; obtaining a derived value from the detected bit-sequence; and verifying that the derived value is consistent with an expected value of the derived value corresponding to a test value of a same statistical characteristic that is dependent on a statistical property of a key generation bit-sequence 334, 1334 used for encoding or decoding of quantum bits to detect tampering. A quantum key generation system 200 is also disclosed.

[Continued on next page]

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