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(54) Title: METHOD AND DEVICE FOR OPTICAL POWER LIMITER

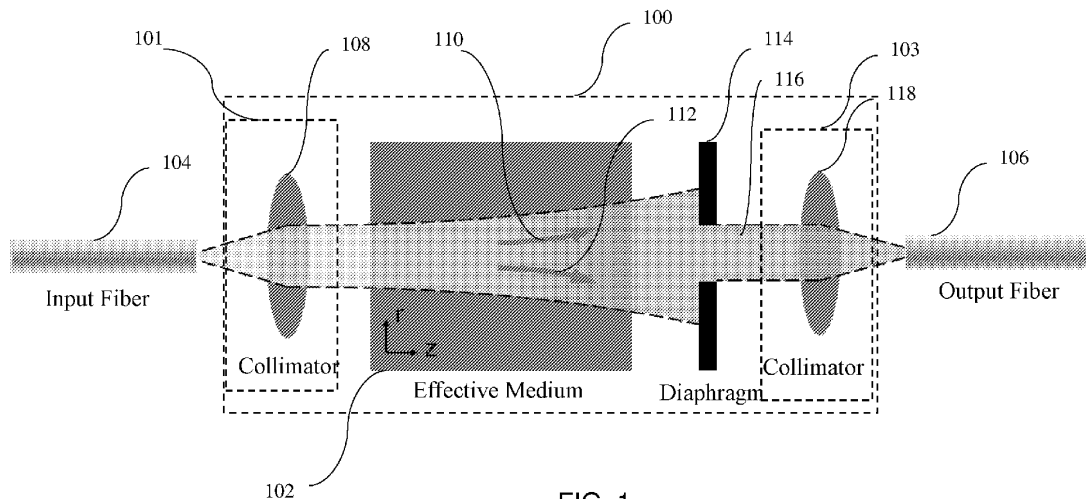


FIG. 1

(57) Abstract: An optical power limiter, a method of fabricating the optical power limiter, a method of limiting optical power, a method of upper bounding information leakage in quantum cryptography, and a quantum cryptography system. The optical power limiter comprises an optical input port; an optical output port; an effective medium disposed between the input port and the output port; and a diaphragm disposed between the effective medium and the output port; wherein the effective medium has a thermo-optic coefficient such that a light beam entering the effective medium from the direction of the input port experiences a refractive index gradient in a direction perpendicular to a propagation direction in the effective medium as a result of absorption; and wherein the diaphragm is disposed in a path of the light beam for limiting how much of the light beam reaches the output port.

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