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(54) Title: AERIAL PAYLOAD DEPLOYMENT SYSTEM AND METHOD OF OPERATING THEREOF

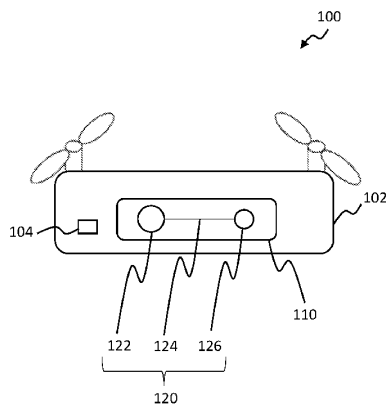


FIG. 1

(57) Abstract: An aerial payload deployment system is provided, including: an aerial vehicle including a flight controller operable to control a flight of the aerial vehicle; and a payload deployment system coupled or couplable to the aerial vehicle and configured to deploy a payload to an elevated lateral pole-like structure. The payload deployment system includes: a tethered payload system including: a tether having a first end portion and a second end portion; and a counterweight coupled to the first end portion of the tether, the second end portion of the tether being coupled or couplable to the payload to be deployed; and a payload release system configured to releasably secure the tethered payload system and is actuable to release the tethered payload system in a manner such that when the tethered payload system descends towards the elevated lateral pole-like structure, the counterweight is spaced laterally apart from the payload, and the payload and the counterweight are at opposite sides of the elevated lateral pole-like structure when the tether reaches and contacts with the elevated lateral pole-like structure.

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