



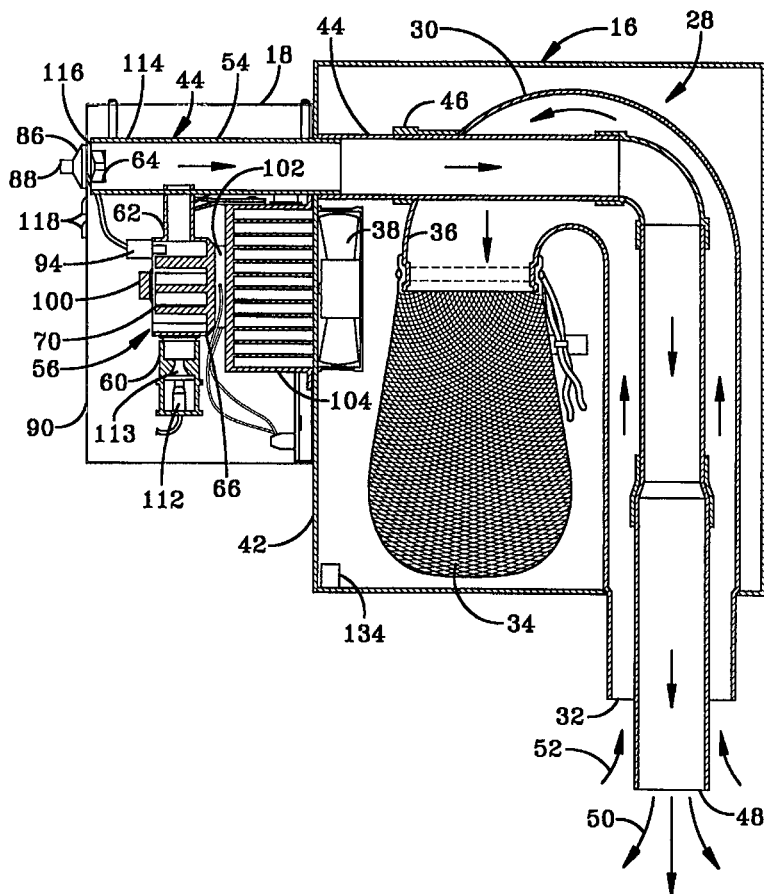
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(54) Title: METHOD AND DEVICE PRODUCING CO₂ GAS FOR TRAPPING INSECTS

(57) Abstract

An insect trapping device generates its own insect attractants of carbon dioxide (CO₂), heat and water vapor through catalytic conversion (84) of a hydrocarbon fuel in a combustion chamber (68). The hot insect attractants generated in the combustion chamber are diluted and cooled to a temperature above ambient temperature and below about 115 °F by mixing with air, and then the mixture is exhausted downward through the exhaust tube (48). A counterflow of outside air (52) is drawn into the trap through the suction tube (32) that concentrically surrounds the exhaust tube. Biting insects are captured in a porous, disposable bag (34) connected to the other end (36) of the suction tube. A thermoelectric generator, including thermoelectric modules (102) coupled to the combustion chamber generate power for fans (38, 64) that provide the exhaust flow and the suction flow. Additional chemical attractants may be used with the device to make the trap even more effective. The trap may be adapted for trapping different types of insects by adjusting airflow velocities and attractants.



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