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ELECTRONIC MOBILE WAVE VECTOR MANAGEMENT SYSTEM

PRIVATE VIEW

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ELECTRONIC MOBILE WAVE VECTOR MANAGEMENT SYSTEM

ABSTRACT

TITLE OF THE INVENTION: Electronic Mobile Wave Vector Management System

INVENTOR: Kurt Paul Grossman

CITIZENSHIP: U.S.A.

CROSS-REFERENCE TO RELATED APPLICATIONS

ABSTRACT OF THE DISCLOSURE

An Electronic Mobile Wave Vector Management System focuses concentrated beams of radio frequency ranging from Hz to GHz to generate energy to manage harmful pests using different types of vehicles either mounted or towed or both deriving power from vehicle generator systems or including mobile generators.

ELECTRONIC MOBILE WAVE VECTOR MANAGEMENT SYSTEM

CLAIMS

TITLE OF THE INVENTION: Electronic Mobile Wave Vector Management System

INVENTOR: Kurt Paul Grossman

CITIZENSHIP: U.S.A.

CROSS-REFERENCE TO RELATED APPLICATIONS

CLAIMS

I claim:

1. In combination, a radio frequency system comprising variable frequency control, variable power output control, directional beams control and focus, transmitting wave energy to generate controlled heat at varying distances;

2. The combination according to claim 1, each system mounted or towed by various vehicle types comprising different transmission systems and designs combined to cover a target area completely during movement that at no point of time during the specified duration will the focused heat energy be diminished.

ELECTRONIC MOBILE WAVE VECTOR MANAGEMENT SYSTEM

SPECIFICATION

TITLE OF THE INVENTION: Electronic Mobile Wave Vector Management System

INVENTOR: Kurt Paul Grossman

CITIZENSHIP: U.S.A.

CROSS-REFERENCE TO RELATED APPLICATIONS: NONE

FIELD OF THE INVENTION

The present invention relates in general to radio frequency and ultrasound directional control and by application mobile vector management.

BACKGROUND

Vector management (also known as vector control or integrated vector management) is a public health strategy focused on limiting or eradicating arthropods and other animals that transmit disease pathogens, such as mosquitoes, ticks, and rodents.

Effective vector management requires evidence-based decision-making and routine monitoring of insecticide resistance to ensure long-term efficacy, strengthening national capacity, improving surveillance, and coordinating across sectors to address emerging threats and prevent disease resurgence.

Key methods include: Habitat and Environmental Control; Chemical Control; Biological Control; Reducing Contact; and considerable research has been done on the effectiveness of using electronic wave technology.

In Scientific Reports from Nature at www.nature.com/scientificreports, published online March 2, 2018, "This RF absorption has already been studied for particular insects at different individual frequencies: 27 MHz, 900–915 MHz, and 2450 MHz…"

Systems for applying energy to biological tissue are well known. Energy may be applied in different forms, such as radiofrequency, laser, or ultrasound.
These systems are capable of directing energy to create heat at a specified distance from the sending equipment to such extent that a cautionary example of ultrasound heat intensity was shown me in 1974 where the operator placed his hand over a cup of cool water adjusted the focal point to boil the water below his hand safely.
Recently an unprecedented infestation of ticks carrying a serious disease has been spreading across the United States causing suffering and devastation of animals.
There is an urgent need to deal with this infestation quickly.

SUMMARY

In some embodiments of the invention, a wave transmitter or an array of wave transmitters are mounted on vehicles such as cars, trucks, tractors, all terrain vehicles, and the like capable of mobility and power generation, in other embodiments of the invention a wave transmitter or an array of wave transmitters are towed, in other embodiments the wave transmitter or an array of wave transmitters are both towed and mounted on vehicles as appropriate.
In some embodiments of the invention, the system may comprise a mobile generator and in other embodiments it may comprise a connection to the electrical system of the vehicle transporting the equipment, and in other embodiments aftermarket generator systems designed to increase vehicle amperage may be installed to provide effective energy concentration.
In some embodiments, control of direction, power, frequency, intensity, duration, and target area for the focused beams of energy will be variable and programmable to apply different algorithms specifically designed for different species.
In some embodiments the wave transmitter or an array of wave transmitters will be mounted in front of the vehicles; in other embodiments they may be mounted on the rear of the vehicle, and in other embodiments they may be mounted to provide a three-hundred-and-sixty-degree coverage around the vehicle or any combination thereof.
In some embodiments of the invention the focused beam or beams may be moved from side to side employing different kind of actuator systems from left to right and right to left and or forwards and backwards to create a pattern of consistent energy beam focus generating heat.

In some embodiments, different types of radio frequency and or ultrasound equipment with different shapes and sizes will be applied to deliver the focused energy beams over a constant period of time capable of generating heat that covers a defined square or rectangular area. Mobile application of the system to infested areas in all kinds of terrain enables electronic vector management instead of chemical solutions.

Applying focused beams of heat to destroy pests like ticks quickly and neutralizing any disease of pathogen left behind enables rapid deployment using existing commercially available equipment in a novel manner.

The commercially available wave equipment has warning labels explaining the danger of close proximity to the energy beams they transmit. This invention applies the dangerous beams to eliminate dangerous pests.