

## United States Patent [19]

Loos

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## [54] SUBLIMINAL ACOUSTIC MANIPULATION OF NERVOUS SYSTEMS

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[52] U.S. Cl. ...... 600/28

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[57] ABSTRACT

In human subjects, sensory resonances can be excited by subliminal atmospheric acoustic pulses that are tuned to the resonance frequency. The ½ Hz sensory resonance affects the autonomic nervous system and may cause relaxation, drowsiness, or sexual excitement, depending on the precise acoustic frequency near ½ Hz used. The effects of the 2.5 Hz resonance include slowing of certain cortical processes, sleepiness, and disorientation. For these effects to occur, the acoustic intensity must lie in a certain deeply subliminal range. Suitable apparatus consists of a portable batterypowered source of weak subaudio acoustic radiation. The method and apparatus can be used by the general public as an aid to relaxation, sleep, or sexual arousal, and clinically for the control and perhaps treatment of insomnia, tremors, epileptic seizures, and anxiety disorders. There is further application as a nonlethal weapon that can be used in law enforcement standoff situations, for causing drowsiness and disorientation in targeted subjects. It is then preferable to use venting acoustic monopoles in the form of a device that inhales and exhales air with subaudio frequency.

## 17 Claims, 5 Drawing Sheets

