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(54) **METHOD AND APPARATUS FOR TREATMENT OF MONOFREQUENCY TINNITUS UTILIZING SOUND WAVE CANCELLATION TECHNIQUES**

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(57) **ABSTRACT**

Tinnitus is defined as sound(s) heard by an individual when no external sound is present and often takes the form of a hissing, ringing, chirping or clicking sound which may be either intermittent or constant. According to the American Tinnitus Association, tinnitus affects tens of millions of Americans and many suffer so severely from tinnitus they are not able to function normally on a daily basis. Unfortunately the exact cause or causes of tinnitus are not understood by the medical community and thus many tinnitus sufferers are told by their doctors to "learn to live with it".

In accordance with novel aspects of Applicant's monofrequency tinnitus patient treatment apparatus and process, phase cancellation effects are achieved by utilizing an externally generated sound which is subjectively selected by the monofrequency tinnitus patient to match in both tone and loudness his or her tinnitus sound. This subjectively selected externally generated sound wave which matches in tone and loudness the patient's tinnitus sound, is either (i) sequentially phase shifted through a plurality of phase shift sequence steps totaling at least 180 degrees or (ii) alternatively is directly phase shifted in essentially a single step motion into a 180 degree, out-of-phase reciprocal, canceling relationship with the patient determined tinnitus tone. The sequential steps of the phase shifted tone or the directly phase shifted tone are applied to the tinnitus patient to effect cancellation or diminishment of the patient's tinnitus.

