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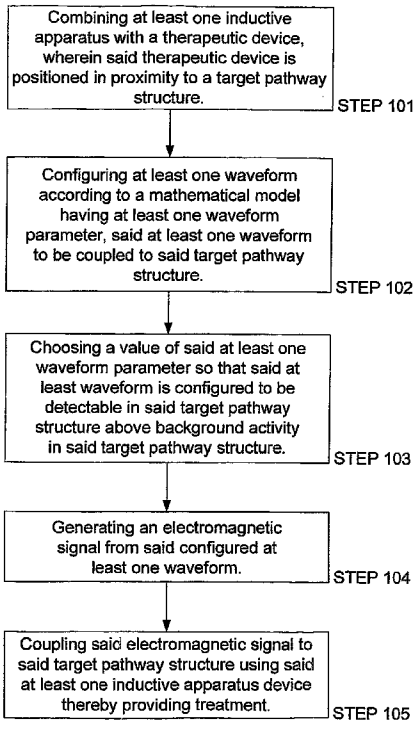
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(54) Title: ELECTROMAGNETIC TREATMENT INDUCTION APPARATUS AND METHOD



(57) Abstract: A lightweight inductive apparatus is integrated into at least one therapeutic device that will be used for treatment, however the inductive apparatus can also be attached to the at feast one therapeutic device (Step 101). Miniaturized circuitry containing logic for a mathematical model having at least one waveform parameter used to configure at least one wavefarm to be coupled to a target pathway structure such as molecules, cells, tissues, and organs, is attached to the coil by at least one wire (Step 102). However, the attachment can also be wireless. The configured waveform satisfies a SNR or Power SNR model so that for a given and known target pathway structure it is possible to choose at least one waveform parameter so that a waveform is detectable in the target pathway structure above its background activity (Step 103) such as baseline thermal fluctuations in voltage and electrical impedance at a target pathway structure that depend upon a state of a cell and tissue, that is whether the state is at least mane of resting, growing, replacing, and responding to injury. A preferred embodiment of a generated electromagnetic signal is comprised of a burst of arbitrary waveforms having at least one waveform parameter that includes a plurality of frequency components ranging from about 0.01 Hz to about 100 MHz wherein the plurality of frequency components satisfies a Power SNR model, A repetitive electromagnetic signal can be generated for example inductively, from said configured at least one waveform (Step 104). The repetitive electromagnetic signal can also be generated conductively. The electromagnetic signal is coupled to a target pathway strucutre such as molecules, cells, tissues, and organs by output of the inductive apparatus integrated into the at least one therapeutic device (Step 105).

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