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(54) **NON-INVASIVE TREATMENT OF
NEURODEGENERATIVE DISEASES**

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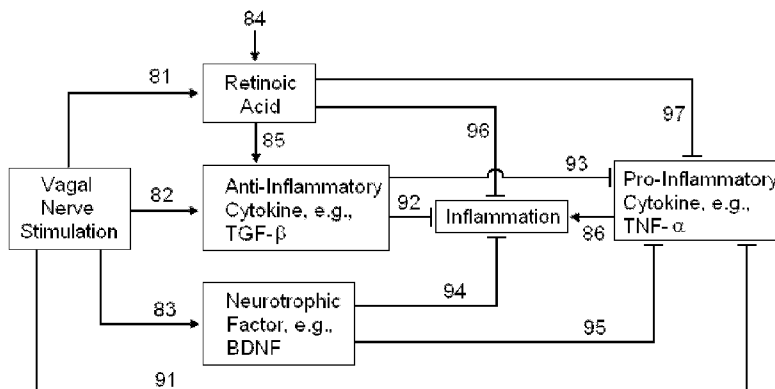
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ABSTRACT

Methods and devices for the non-invasive treatment of neu-
rodegenerative diseases through delivery of energy to target
nervous tissue, particularly the vagus nerve. In certain
embodiments, the devices include a magnetic stimulator hav-
ing coils with toroidal windings, which are in contact with an
electrically conducting medium that is adapted to conform to
the contour of a target body surface of a patient. The coils
induce an electric current and/or an electric field within the
patient, thereby stimulating nerve fibers within the patient.
The stimulation brings about reduction of neuroinflammation
in patients suffering from conditions comprising Alzheimer's
Disease, Parkinson's Disease, Multiple Sclerosis, postopera-
tive cognitive dysfunction and postoperative delirium.

60 Claims, 7 Drawing Sheets



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