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(71) Applicant: **NEUVANA, LLC** [US/US]; 2041 Vista Parkway, Suite 201, West Palm Beach, Florida 33411 (US).

(72) Inventors: **BRANNON, Ami**; 2041 Vista Parkway, Suite 102, West Palm Beach, Florida 33411 (US). **FALK, Kermit**; 2041 Vista Parkway, Suite 102, West Palm Beach, Florida 33411 (US). **MANOPOLI, Vincent**; 2041 Vista Parkway, Suite 102, West Palm Beach, Florida 33411 (US).

(74) Agent: **FISCHER, Ury**; Lott & Fischer, PL, P.O. Box 141098, Coral Gables, Florida 33114-1098 (US).

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(54) **Title:** METHOD FOR CALIBRATION OF TRANSCUTANEOUS NERVE STIMULATOR

Step	Stimulation Level	Level Variation (to be applied at next iteration)	User Reports Feeling Stimulus?
1	0 Volts	First (7 Volts)	No
2	7 Volts	First (7 Volts)	No
3	14 Volts	First (7 Volts)	No
4	21 Volts	Second (1 Volt)	Yes (decrease level by 7 volts)
5	14 Volts	Second (1 Volt)	No
6	15 Volts	Second (1 Volt)	No
7	16 Volts	Third (0.25 Volt)	Yes (decrease level by 1 volt)
8	15.0 Volts	Third (0.25 Volt)	No
9	15.25 Volts	Third (0.25 Volt)	No
10	15.5 Volts	Third (0.25 Volt)	Yes (decrease level by 0.25 volts)
11	15.25	N/A	N/A

FIG. 1

(57) **Abstract:** Method for calibrating a nerve stimulation device comprising (a) providing user with an initial stimulus at a sub-sensory level and obtaining feedback regarding whether stimulus is felt; (b) if it is not felt, increasing the stimulation level by a first level variation and again obtaining feedback; (c) repeating the previous step until feeling the stimulus is reported; (d) reducing stimulus by the initial level variation; (e) repeating the process from the previously established level while using a second level variation is used which is smaller than the first level variation; (f) once stimulus feeling is reported, the level is again reduced by the second level variation; (g) this level, achieved after the second "crossing" of the threshold, can be used as the sensory threshold value; (h) additional calibration rounds can be conducted using ever-lower level variations for each subsequent round to more accurately the sensory threshold is determined.

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