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(54) Title: ELECTROSTIMULATION AND JOINT STABILIZATION FOR ARTHRITIS

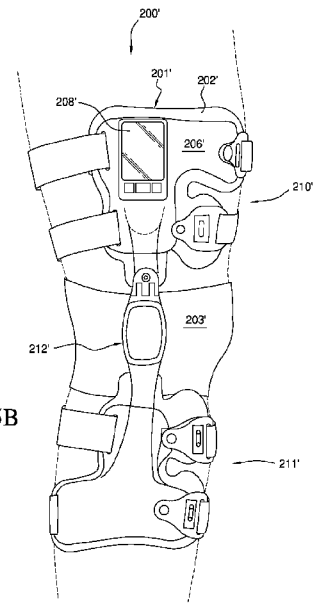

FIG. 25B

(57) Abstract: According to various embodiments of the invention, an orthotic device system or other joint stabilizing assembly comprises at least one discrete liner segment; at least one electrode or other signal transmission element disposed on the liner segment configured to contact the wearer's anatomy; and an electrostimulation unit configured to provide an electrophysical modality for improving the overall function of an arthritic joint. The electrode includes a backing layer having an outer surface for attachment to an orthotic device; a conductive layer configured to transmit an electrical signal; an interface layer configured to conform to a wearer's anatomy and to conduct the signal; and, a connection member configured to electrically couple with a contact disposed on the orthotic device. The electrostimulation unit used in conjunction with the joint stabilizing assembly provides a synergistic effect, which results in optimized joint treatment versus using either the joint stabilizing assembly or electrostimulation unit alone.

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