

Title (en)

AN ORTHOPEDIC DEVICE SUPPORTING TWO OR MORE TREATMENT SYSTEMS AND ASSOCIATED METHODS

Title (de)

ORTHOPÄDISCHE VORRICHTUNG DIE ZWEI ODER MEHRERE BEHANDLUNGSSYSTEME UNTERSTÜTZT UND DAZUGEHÖRENDES VERFAHREN

Title (fr)

DISPOSITIF ORTHOPEDIQUE SUPPORTANT AU MOINS DEUX SYSTEMES DE TRAITEMENT ET PROCEDES ASSOCIES

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Application

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Abstract (en)

[origin: WO9636278A1] An orthopedic restraining device (100) controls and monitors two functionally distinct orthopedic treatments through a portable, programmable control unit (106). The functionally distinct treatments are selected from exercise based treatments and treatments based on energy propagating transducers. The exercise based treatment structures can be isometric exercise structures or non-isometric based treatment structures. The energy propagating transducer based treatment structures include ultrasonic transducer based treatment structures, pulsed electromagnetic treatment structures, and electrical conduction based treatment structures. An alternative device incorporates a hinge (116) on a support structure (108) for non-isometric exercise where the resistance or range in the hinge (116) can be controlled by electrical signals from a control unit (106). The invention gives a physician the power to design an entire treatment program for a patient using a variety of treatment methods coordinated and monitored through a control unit. The invention integrates the control of each of the selected treatments to optimize treatment results.

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