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Burnett et al.

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(54) **METHOD AND APPARATUS FOR
 ELECTROMAGNETIC STIMULATION OF
 NERVE, MUSCLE, AND BODY TISSUES**

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 patent is extended or adjusted under 35
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(51) **Int. Cl.**⁷ **A61N 1/00**

(52) **U.S. Cl.** **607/2; 607/149; 607/155**

(58) **Field of Search** **600/9, 13-15;
 607/2, 48, 50, 149, 155**

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(74) *Attorney, Agent, or Firm*—Maine & Asmus

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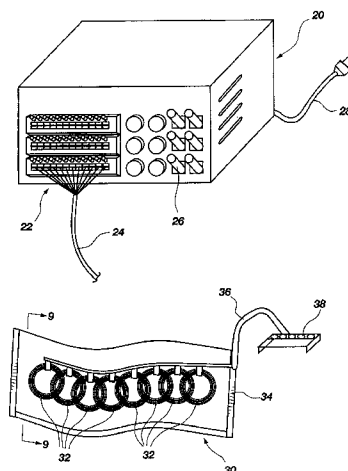
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(57) **ABSTRACT**

An electromagnetic stimulation device which is comprised
 of a plurality of overlapping coils which are able to be
 independently energized in a predetermined sequence such
 that each coil will generate its own independent electromag-
 netic field and significantly increase the adjacent field. The
 coils are co-planar and are disposed in an ergonomic body
 wrap, which is properly marked to permit an unskilled
 patient to locate the body wrap, on a particular part of the
 body, of the patient so that the stimulation coils will maxi-
 mize the electromagnetic stimulation on the selected nerves,
 muscles, and/or body tissues near the treated area. The
 device can be used to treat medical conditions including:
 muscular atrophy, neuropathic bladder and bowel, muscu-
 loskeletal pain, arthritis, as well as possible future applica-
 tions in the prevention of deep vein thrombosis and weight
 reduction.

10 Claims, 3 Drawing Sheets



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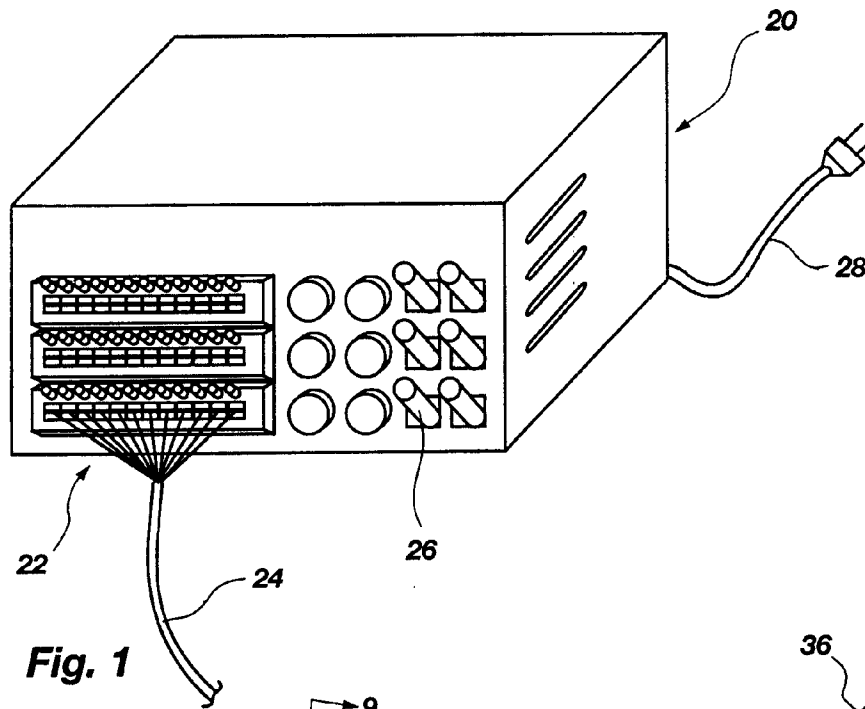
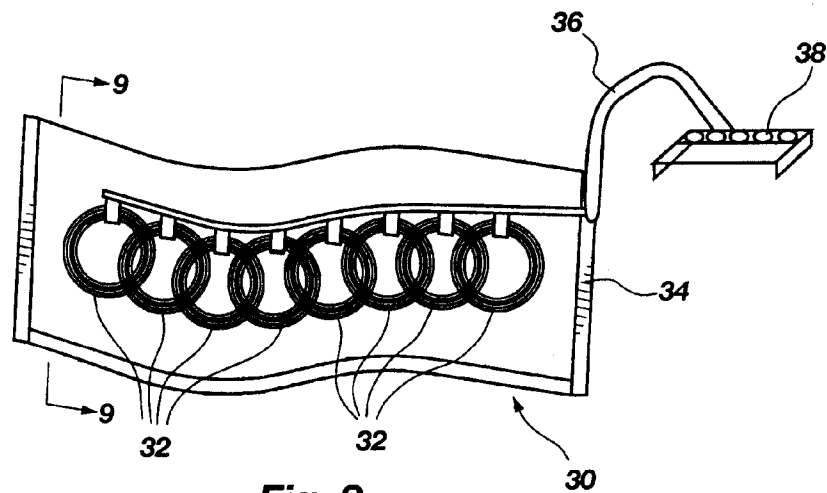
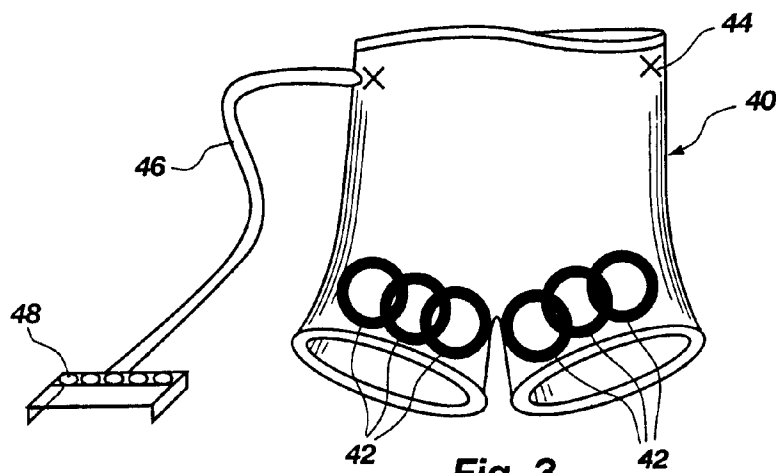
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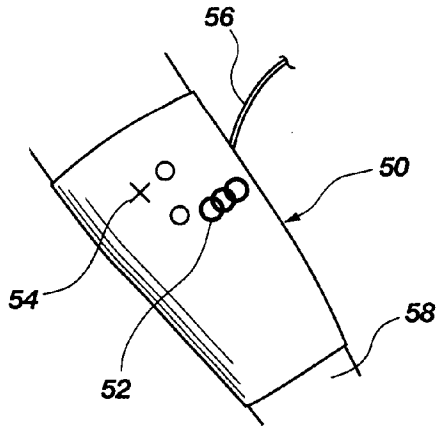
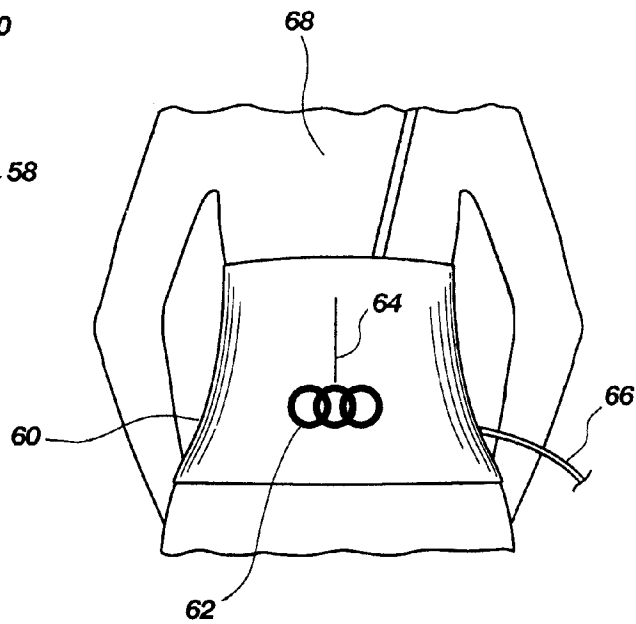
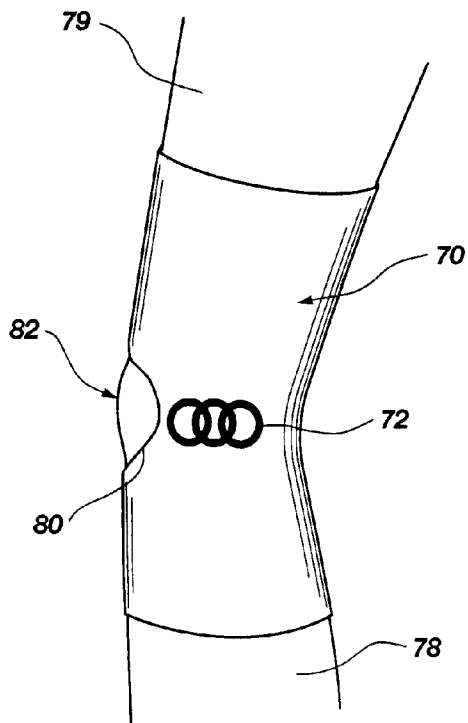
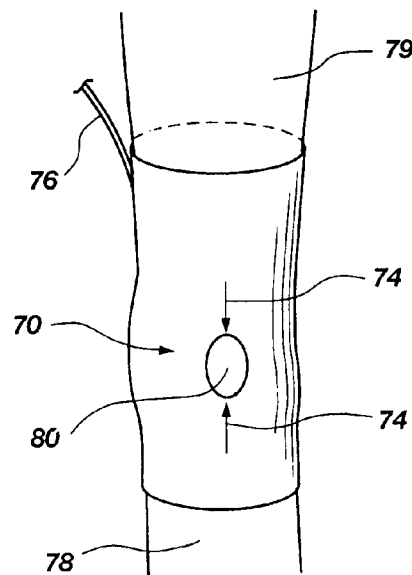
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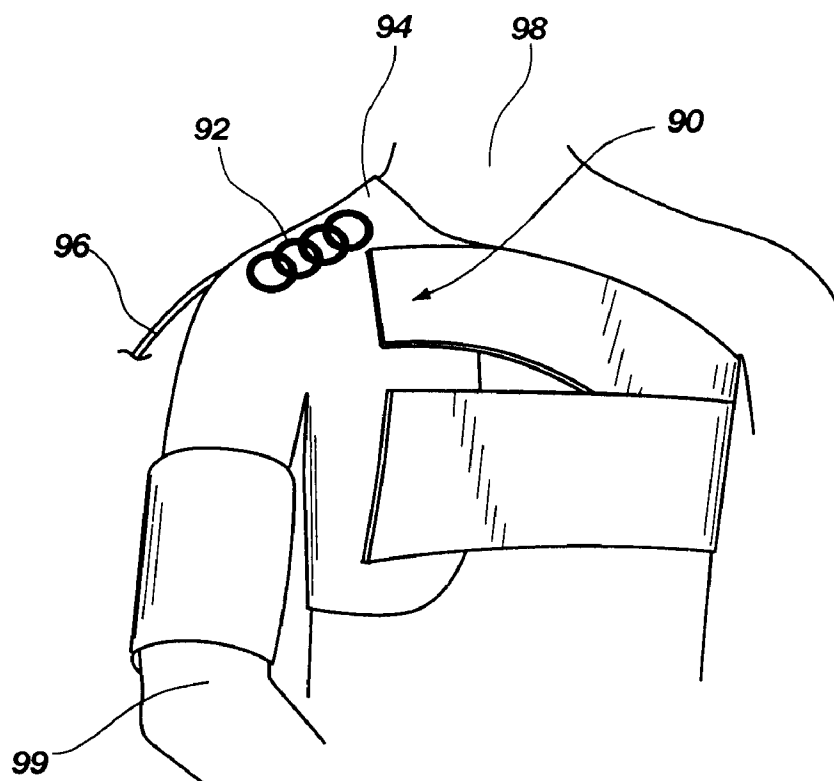
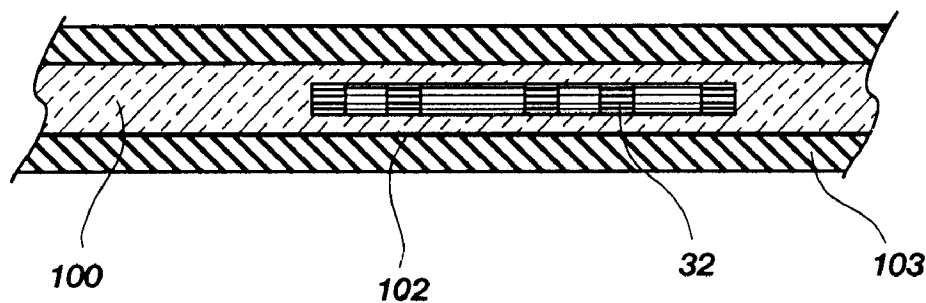
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**Fig. 1****Fig. 2****Fig. 3**

**Fig. 4****Fig. 5****Fig. 6****Fig. 7**

**Fig. 8****Fig. 9**

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