SYSTEMS AND METHODS FOR CONTROLLING AND MONITORING INFLATABLE PERFUSION ENHANCEMENT APPARATUS FOR MITIGATING CONTACT PRESSURE

ABSTRACT

Introduced here are methods, apparatuses, and systems for mitigating the contact pressure applied to a human body by the surface of an object, such as a chair, bed, or table. A pressure-mitigation apparatus can include a series of chambers whose pressure can be individually varied. When placed between a patient and a contact surface, a controller can vary the contact pressure on the human body by controllably inflating one or more chambers, deflating one or more chambers, or any combination thereof. By monitoring the pressure in each chamber over time, the controller can also gain an enhanced understanding of movement(s) performed by the human body when positioned on the pressure-mitigation apparatus.

Fig. 12