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(54) Title: SUPPORT SURFACE OVERLAY WITH ACOUSTIC PATIENT DETECTION

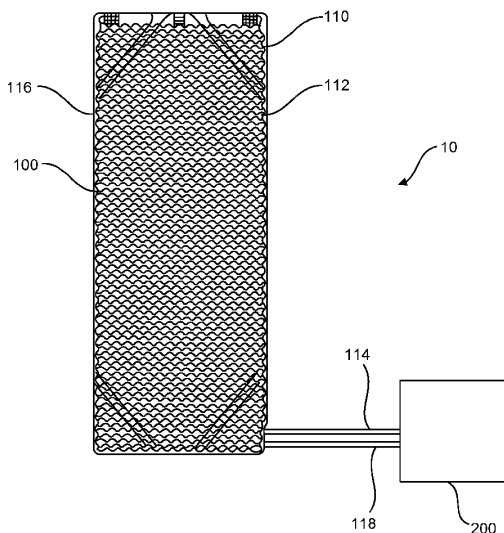


FIG. 1

(57) Abstract: A support surface overlay system (10) includes a support surface overlay (100) and a control system (200). The support surface overlay includes at least one selectively inflatable compartment (112). The control system (200) includes a pneumatic controller (202) configured to inflate and deflate the at least one selectively inflatable compartment (112). The control system (200) also includes a memory (210), a sensor (214), and a processor (210). The memory (210) is programmed with a predetermined data indicative of an operating parameter of the system (10) vs. time with the support surface overlay (100) in an unloaded state. The sensor (214) is configured to detect and provide signals indicative of the operating parameter of the system (10) vs. time during inflation and/or deflation of the at least one selectively inflatable compartment (112). The processor (210) is configured to compare the predetermined data to the data provided by the sensor (214) and to determine whether or not a load is present on the support surface overlay (100) based on the comparison.

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