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(54) Title: SEM SCANNER SENSING APPARATUS, SYSTEM AND METHODOLOGY FOR EARLY DETECTION OF ULCERS

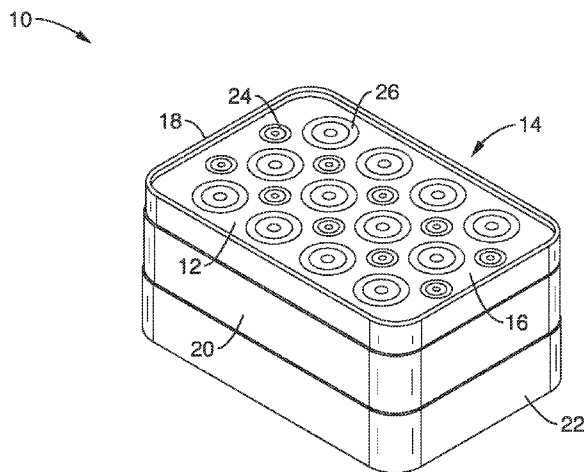


FIG. 1

(57) Abstract: A handheld, conforming capacitive sensing apparatus configured to measure Sub-Epidermal Moisture (SEM) as a mean to detect and monitor the formation of pressure ulcers. The device incorporates an array of electrodes which are excited to measure and scan SEM in a programmable and multiplexed manner by a battery-less RF-powered chip. The scanning operation is initiated by an interrogator which excites a coil embedded in the apparatus and provides the needed energy burst to support the scanning/reading operation. Each electrode measures the equivalent sub-epidermal capacitance corresponding and representing the moisture content.



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