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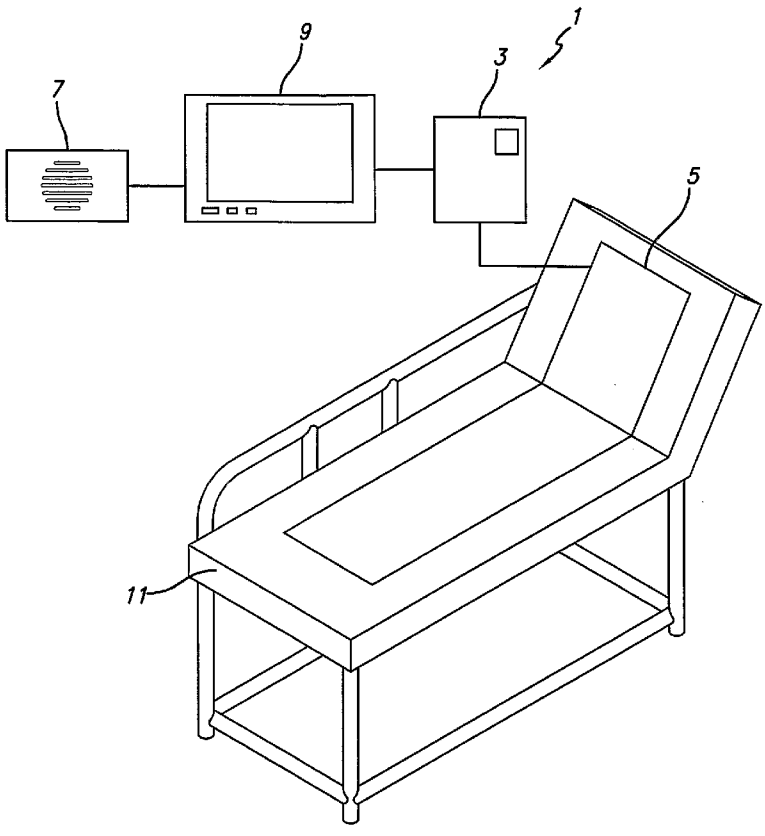
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(54) Title: INTELLIGENT MEDICAL VIGILANCE SYSTEM




(57) Abstract: An intelligent medical vigilance system that observes and analyzes, and, only in the event of a clinically significant negative condition, notifies and reports the event to the care staff utilizing the hospital's existing nurse call system. The device includes a bedside unit connected to a pad or coverlet with a sensor array (placed under the patient) and also to an existing hospital nurse call system via an interface. Within the physical bedside unit are a signal processor and an alarm processor that measure data and evaluate whether a clinically significant event is occurring. The bedside unit is a wall-mounted unit with a display that becomes active when an alarm condition is enabled. The sensing pad or coverlet is a thin, piezoelectric film, or other similar sensing technology, with an array of sensors sheathed in soft padding and is not directly in contact with the skin of the patient. The nurse call feature is made up of hardware, software and cabling to connect to the nurse call system already installed in the hospital or care facility. The monitoring system can also be installed in vehicles to monitor operator physiological conditions.

WO 2005/055824 A1

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