ABSTRACT

PATCH-LIKE INFUSION DEVICE

A system and method for a patch-like, self-contained substance infusion device (700) which provides hidden patient needles (760) that includes a rigid bladder (712) used with a non-distensible bladder film (740), such as a metallized film. The device (700) can be attached to skin via an adhesive surface and a push button (780) activation assembly can be used to remove an interlock (730), allowing a disk, or Belleville spring (735) assembly to apply constant pressure to a fluid reservoir assembly (710). The push button (780) assembly allows the release of one or more spring-loaded patient needles (760) into the skin, and establishes a fluid path between the patient needles (760) and the pressurized fluid reservoir thereby delivering an infusion into the skin. The push button (780) activation assembly further allows the release of safety mechanisms (794) which are driven by spring (793) and released by trap-door (790).

FIGURE 38