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[54] **HIGHLY CONDUCTIVE NON-STRINGY ADHESIVE HYDROPHILIC GELS AND MEDICAL ELECTRODE ASSEMBLIES MANUFACTURED THEREFROM**

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[58] **Field of Search** 128/639–641, 128/798, 802, 803; 252/500

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[57] **ABSTRACT**

The highly conductive hydrogels of this invention are comprised of a cohesive uniform mixture of poly(vinyl pyrrolidone), a viscosity-enhancing hydrophilic polymer, and an effective amount of an electrolyte. This polymeric mixture which is crosslinked by exposure to radiant energy provides a gel-like solid which is sufficiently tacky and adhesive to adhere to the subjects' skin and yet is substantially non-stringy and non-aggressive such that the use of such hydrogel imparts less discomfort to the user. In addition, the consumer utilizing the product of this invention would not experience the objectionable sticky, stringy sensation associated with existing conductive adhesive gels.

39 Claims, No Drawings