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(54) Title: TRANSDERMAL DELIVERY SYSTEM

(57) Abstract: The invention relates to transdermal therapeutic system for the transdermal administration of buprenorphine, comprising a buprenorphine-containing self-adhesive layer structure comprising A) a buprenorphine-impermeable backing layer, and B) a buprenorphine-containing pressure-sensitive adhesive layer on said buprenorphine-impermeable backing layer, the adhesive layer comprising a) at least one polymer-based pressure-sensitive adhesive, b) an analgesically effective amount of buprenorphine base or a pharmaceutically acceptable salt thereof, c) a viscosity-increasing substance in an amount of about 0.1% to about 8% of said buprenorphine-containing pressure-sensitive adhesive layer, and d) a carboxylic acid selected from the group consisting of oleic acid, linoleic acid, linolenic acid, levulinic acid and mixtures thereof, in an amount sufficient so that said analgesically effective amount of buprenorphine is solubilized therein to form a mixture including said viscositiy-increasing substance, and wherein the carboxylic acid-, buprenorphine- and viscosity-increasing substance-containing mixture forms dispersed deposits in the said pressure-sensitive adhesive, and wherein said buprenorphine-containing pressure-sensitive adhesive layer is the skin contact layer.