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(54) **METHOD AND APPARATUS FOR CONTROLLING A SKIN TEXTURE SURFACE ON A DEVICE USING HYDRAULIC CONTROL**

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(57) **ABSTRACT**

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A portable device (100) includes a controllable skin texture surface that includes a skin texture surface actuation structure that includes a hydraulic actuation structure and a flexible skin structure (1100) that moves in response to movement of fluid to change a tactile configuration of at least a portion (322) of the controllable skin texture surface. In one example, a substrate (1104) includes one or more fluid channels (1106) and the flexible skin structure includes a plurality of fluid pockets (1102) corresponding to texture features that are in fluid communication with at least one fluid channel. A fluid pump (1702) that moves the fluid in and out of the fluid passages may be controlled either by electronic control signals or mechanical movement of a movable housing portion (110).

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