



US 20100079264A1

(19) **United States**

(12) **Patent Application Publication**  
**HOELLWARTH**

(10) **Pub. No.: US 2010/0079264 A1**

(43) **Pub. Date: Apr. 1, 2010**

(54) **HAPTIC FEEDBACK SYSTEM**

**Publication Classification**

(75) Inventor: **Quin C. HOELLWARTH**, Kuna,  
ID (US)

(51) **Int. Cl.**  
**G08B 6/00** (2006.01)

(52) **U.S. Cl.** ..... **340/407.2**

(57) **ABSTRACT**

Correspondence Address:  
**APPLE C/O MORRISON AND FOERSTER, LLP**  
**LOS ANGELES**  
**555 WEST FIFTH STREET SUITE 3500**  
**LOS ANGELES, CA 90013-1024 (US)**

Localized haptic feedback at discrete locations or regions of a surface is disclosed. Controllable haptic transmission nodes can be selectively controlled to transmit a haptic feedback signal to a surface. The nodes can be controlled between a first state that transmits the haptic feedback signal to the surface and a second state that dampens or prevents the haptic feedback signal to the surface. The nodes can be located around the perimeter of the surface, where each node can be associated with a particular location or region of the surface and can provide haptic feedback to that particular location or region when the node is selected. A touch surface of a touch sensitive device is an exemplary surface for using localized haptic feedback.

(73) Assignee: **Apple Inc.**, Cupertino, CA (US)

(21) Appl. No.: **12/240,947**

(22) Filed: **Sep. 29, 2008**

