



(19) **United States**

(12) **Patent Application Publication**  
**Armstrong**

(10) **Pub. No.: US 2002/0175900 A1**

(43) **Pub. Date: Nov. 28, 2002**

(54) **TOUCH INPUT SYSTEM**

**Publication Classification**

(76) **Inventor: Donald B. Armstrong, Belmont, CA (US)**

(51) **Int. Cl.<sup>7</sup> ..... G09G 5/00**  
(52) **U.S. Cl. .... 345/173**

Correspondence Address:  
**TYCO ELECTRONICS CORPORATION**  
**MAIL STOP R20/2B**  
**307 CONSTITUTION DRIVE**  
**MENLO PARK, CA 94025 (US)**

(57) **ABSTRACT**

In one aspect, the present invention provides a touch input system for use with an information display system. The touch input system includes a frame have four sides defining a touch input area. On each side is positioned an array of light emitting devices. In a preferred embodiment, the light emitting devices are organic light emitting diodes. A light transmissive prism is positioned along each array of light emitting devices such that light emitted from the light emitting devices is directed across the touch input area. The system also includes light detection device positioned at each corner of the frame.

(21) **Appl. No.: 10/116,442**

(22) **Filed: Apr. 4, 2002**

**Related U.S. Application Data**

(60) **Provisional application No. 60/281,457, filed on Apr. 4, 2001.**

