



(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0085882 A1**  
**Lu** (43) **Pub. Date: May 8, 2003**

(54) **MULTI-POINT TOUCH PAD**

**Publication Classification**

(75) Inventor: **Jin Lu**, Croton on Hudson, NY (US)

(51) **Int. Cl.<sup>7</sup>** ..... **G09G 5/00**

(52) **U.S. Cl.** ..... **345/173**

Correspondence Address:  
**Corporate Patent Counsel**  
**U.S. Philips Corporation**  
**580 White Plains Road**  
**Tarrytown, NY 10591 (US)**

(57) **ABSTRACT**

A multi-point touch pad device having a base with a top surface that defines a plane. A support layer has a top surface and a bottom surface. The top surface of the support layer contains a plurality of strain gauges that are disposed on the top surface of the support layer in a matrix configuration. A touch layer is disposed on top of the strain gauge matrix; the touch layer is joined to the top of the strain gauge matrix. Sensor wires connect the strain gauges to a processor which is programmed with an algorithm to measure the location and pressure of simultaneous, multiple touches.

(73) Assignee: **KONINKLIJKE PHILIPS ELECTRONICS N.V.**

(21) Appl. No.: **10/008,216**

(22) Filed: **Nov. 8, 2001**

