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Lam et al.

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(54) **COMBINED COMPUTER MOUSE AND BLOOD PRESSURE SPHYGMOMANOMETER**

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(57) **ABSTRACT**

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A sphygmomanometer cuff assembly, air pump, pressure sensor and release valve are contained in an otherwise conventional computer mouse controller. Three alternative embodiments are illustrated and discussed herein. In one such embodiment the sphygmomanometer cuff is nominally positioned within the mouse structure and is extended outside the mouse housing during the measurement. In another embodiment, the cuff is always external of the mouse structure and is easily connected to the mouse at special ports during the measurement. In yet another embodiment, the cuff is always internal of the mouse structure and is readily accessible through an aperture in the housing surface of the mouse to permit the measurement to take place. Preferably, in each of these alternative embodiments a hinged or slidable door or panel protects the cuff or cuff ports between measurements. In all of the embodiments shown herein, the sphygmomanometer cuff is configured for receiving a human finger in circumambient pressured engagement using controlled air pressure to vary the cuff/finger engagement pressure in a precise manner.

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A61B 5/00 (2006.01)

(52) **U.S. Cl.** **600/485; 600/490; 600/500; 600/300; 600/549; 600/309; 600/345; 600/547**

(58) **Field of Classification Search** None
See application file for complete search history.

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8 Claims, 10 Drawing Sheets

