CONVERTIBLE COMPUTER INPUT DEVICE

A computer input device (100) has function buttons (108) which can be moved relative to a position sensor. The device can be used as a mouse. In specific embodiments of the device, the position sensor includes a rotatable ball and the device can be operated either as a mouse or as a trackball. Such embodiments have a ball-carrying member (120) which is movably connected to a member (102) which carries one or more function buttons. When configured for mouse operation the ball-carrying member (120) underlies the member which carries the function buttons and a ball (124) on the ball-carrying member frictionally engages a surface under the input device. When configured for operation as a trackball the ball (124) is offset relative to the function buttons (108) so that the ball can be comfortably operated by a user’s thumb. The device can be shaped to fit a user’s hand ergonomically in both mouse mode and trackball modes. A user can reduce the risk of injury caused by repetitive motions by periodically switching between mouse operation and trackball operation. Some embodiments have a storage configuration in which the position sensor is held in a protected location. Some embodiments are adjustable to accommodate different hand sizes. In some embodiments a member carrying the function button can be separated from a member carrying the position sensor to permit two-handed operation.
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC.

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data bank and, where practical, search terms used)
PAJ, WPI Data, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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