side keyboard section **210** with a right side keyboard section **212**. The first hinge connects the keyboard sections between a staggered column of keys in the typical keyboard layout as shown in FIG. **2***b*. The location of the break for the keyboard sections is chosen such that each side of the keyboard has the keys associated with either the right or left hand according to the typing strokes of a touch typist, preferably using the industry standard QUERTY keyboard. The keyboard may also contain function keys **226** in one or both of the keyboard sections as indicated in FIG. **2***b*. In the preferred embodiment, the housing containing the sections of the keyboard have a straight edge at the hinge with the keys associated with the QUERTY on either section. Therefore, although the keys of the left and right section have a jagged break point, the housing has a simple straight edge. This gives a simpler housing structure over prior art U.S. Pat. No. 5,457,453 to Chiu et al, incorporated herein by reference.

The first section of the keyboard **210** may be electrically connected with a flexible connection through the hinge **108** to the second section **212** or directly to the motherboard located in the housing **202**. The sections **210**, **212** may incorporate individual circuit boards for interconnecting the keys, or they may use a single flexible circuit board with the interconnections between the sections through the hinge **208**.

A second hinge **214**, shown in FIG. **2***a* and FIG. **2***b*, pivotally connects the two hinged keyboard sections to the housing **202**. In the illustrated preferred embodiment, the second hinge **214** is integrally formed with the housing **202** and has a lower surface in a plane with the lower surface of the housing in such a way as to insure the keyboard and housing will lie securely on a flat surface allowing the user to type comfortably with the keyboard in a deployed position. The second hinge **214** also preferably incorporates electrical connections from the keys to the main processing board of the computer to transmit signals corresponding to the pressing of keys by the user. Also in this preferred embodiment is a pen holder cavity **216** integrally formed with the housing **202** to hold pen **224** as shown in FIG. **2***a*.

FIG. **2***c* shows a side view of the preferred embodiment of FIG. **2***a* with the keyboard **206** in the deployed position, while FIG. **2***d* shows a side view of the preferred embodiment of FIG. **2***a* with the keyboard **206** in the stowed position. The keyboard is stowed by first folding the keyboard about hinge **208**, shown by the arrow in FIG. **2***a* and then rotating the folded keyboard into the cavity **218** in the underside of the housing, shown by the arrow in FIG. **2***c*. FIG. **2***e* represents a sectional view as indicated in FIG. **2***b* at **2***e*—**2***e*.

With reference to FIG. **3***a* a plan view of a third embodiment of the present invention also shown in connection with a portable pen computer **300**. Computer **300** includes a housing **302** with a screen **304**, and is uniquely provided with a triple folding keyboard **306** shown in the deployed position in FIG. **3***a*. In this embodiment, the keyboard comprises a fast hinge **308** connecting a left side keyboard section **310** with a center keyboard section **306**. A second hinge **309** connects a right side keyboard section **312** to the center keyboard section **306**. The keyboard may contain function keys **326** in one or both of the keyboard sections as indicated in FIG. **3***b*. The sections of the keyboard are preferably electrically connected with a flexible connection through the hinge **308** to the center section **306**. The three keyboard sections **310**, **312**, **306** may incorporate individual circuit boards for interconnecting the keys, or they may use a single flexible circuit board with the interconnections between the sections through the hinges **308**, **309**.

A third hinge **314**, shown in FIG. **3***a* and FIG. **3***b*, pivotally connects the three hinged keyboard sections to the housing **302**. In the illustrated preferred embodiment, the second hinge **314** is integrally formed with the housing **302** and has a lower surface in a plane with the lower surface of the housing in such a way as to insure the keyboard and housing will lie securely on a flat surface allowing the user to type comfortably with the keyboard in a deployed position. The third hinge **314** also preferably incorporates electrical connections from the keys to the main processing board of the computer to transmit signals corresponding to the pressing of keys by the user.

FIG. **3***b* shows a side view of the preferred embodiment of FIG. **3***a* with the keyboard **312** in the deployed position, while FIG. **3***c* shows a side view of the preferred embodiment of FIG. **3***a* with the keyboards **306**, **310**, **312** in the stowed position. The keyboard is stowed by first folding the keyboard about hinges **308**, **309**, with the direction shown by the arrows in FIG. **3***a* and then rotating the folded keyboard into the cavity **318** in the underside of the housing **302**, shown by the arrow in FIG. **3***b*.

FIG. **3***d* represents a side view of the embodiment represented in FIG. **3***a* with the additional capability of a hinged housing or legs from the housing to support the display in an upright position for a better viewing angle for the user when the computer is placed on a flat surface. This feature of this embodiment further bridges the gap from a PDA to a subnotebook of the prior art and emphasizes that the terms used for classification such as PDA, notebook and subnotebook become arbitrary or confusing at best. Therefore it should be noted that these terms have only been used for example.

With reference to FIG. **4***a* a plan view of a fourth embodiment of the present invention also shown in connection with a portable pen computer **400**. Computer **400** includes a housing **402** with a screen **404**, and is uniquely provided with a combination folding and rotating keyboard **406** shown in the deployed position in FIG. **4***a*. In this embodiment, the keyboard comprises a first hinge **408** connecting a left side keyboard section **410** with a right side keyboard section **412**. The keyboard may contain function keys **426** in one or both of the keyboard sections. The keyboard may have the keys split with the left and right hand keys, preferably of the QUERTY keyboard, split between left keyboard **410** and right keyboard **412**, or the standard alpha keys could all be located on one keyboard and the functional keys on the other.

A second hinge or rotation mechanism **414**, shown in FIG. **4***a*, pivotally connects the two hinged keyboard sections to the housing **402**. In the illustrated preferred embodiment, the second hinge **414** is formed in such a way as to insure the keyboard and housing will lie securely on a flat surface allowing the user to type comfortably with the keyboard in a deployed position. Also, the housing **404** preferably has a leg portion **418** to provide stability to the housing in the deployed position.

FIG. **4***b* shows a side view of the preferred embodiment of FIG. **4***a* with the keyboard **406** in the stowed position. The keyboard is stowed by first folding the keyboard about hinge **408** from left to right, left keyboard **410** over right keyboard **412**, and then rotating the folded keyboards into the cavity **420** in the underside of the housing **402**, shown by the arrow in FIG. **4***b*.

While this invention has been described with reference to illustrative embodiments, this description is not intended to be construed in a limiting sense. Various modifications and