[0093] In step **620**, the process is repeated for the n layers that comprise the interior of the flexible electronic device. The number of layers may depend on, for example, the type of flexible electronic device, the features to be included in the flexible electronic device, the size of the flexible electronic device, etc.

[0094] In step **625**, the front layer is positioned over the nth layer. In one embodiment, the front layer may be a clear plastic layer. The front layer may also be concave and may be configured to mate with the backing layer.

[0095] In step **630**, the adhesive layers are cured. In one embodiment, this may occur as each layer is assembled, or after multiple layers are assembled. In another embodiment, multiple curing techniques may be applied to the same layer. In still another embodiment, the curing may be performed after the flexible electronic device is sealed.

[0096] Depending on the adhesives used in the flexible electronic device, more than one type of curing may be used. As noted above, curing may be achieved by several techniques, including ultrasound, RF, heat, etc.

[0097] In step **635**, the flexible electronic device is sealed. In one embodiment, the flexible electronic device may be substantially hermetically sealed. In another embodiment, the flexible electronic device may be completely hermetically sealed.

[0098] Referring to FIG. **7**, an exemplary cross section of a flexible electronic device is provided. Flexible electronic device included back case **605**, intermediate layers **710**, **720**, **730**, **740**, heat sink layer **715**, electronics layer **725**, display layer **735**, and front case **745**. In one embodiment, intermediate layers **710**, **720**, **730**, **740** may be adhesive layers, shock absorbing layers, heat sink layers, or a combination.

[0099] It should be recognized that greater or fewer number of layers may be provided as necessary and/or desired. It should also be recognized that, although FIG. **6** illustrates each layer has having a certain function, a layer may have multiple functions. For example, a layer may provide electronics and display functionality. Another example is that a layer may provide the acoustic cavity and rechargeable battery. Still another example is a layer providing electronics and shock absorption functionality. Any combination of functionalities may be provided as necessary and/or desired.

[0100] Referring to FIG. **8**, example of system **800** for manufacturing a flexible electronic device by lamination is provided. In one embodiment, at least one roller **810** provide the "stock" of each layer or layers that will be laminated, resulting in become the flexible electronic device laminate **875**. For example, one roller **810** may contain a continuous sheet of front portions **815** for the flexible electronic device, one roller **810** may contain a continuous sheet of shock absorption/adhesive layer **825** for the flexible electronic device, one roller **810** may contain a continuous sheet of electronics (e.g., flexible printed circuit board, etc.) **830** for the flexible electronic device, and so on. The last roller **810** may contain a continuous sheet of back portions **835** for the flexible electronic device. The number of rollers **810** may depend on the number of layers, etc.

[0101] In one embodiment, inflexible (or mostly inflexible) components may be provided for a particular layer after the layer is unrolled from roller **810**. This may involve automated or manual positioning of the component(s) on the layer.

[0102] Rollers **850** may be provided to combine layers **820**, **825**, **830**, **835** etc. that comprise the flexible electronic device into laminate **875**. In one embodiment, rollers **850** may press the layers together.

[0103] Curing (e.g., ultrasound, RF, heat, etc.) may be performed by curing device **860**.

[0104] Laminate **875** may be separated into individual flexible electronic devices. In one embodiment, laminate **875** may be rolled onto a roller (not shown) for storage. The diameter of this roller may depend on, for example, the flexibility of the laminate.

[0105] In one embodiment, multiple lamination stages may be employed. For example, in one embodiment, instead for being provided from roller **810**, layer **830** may itself be a laminate that is the output of a combination of a lamination process. This may be particularly useful when, for example, different types of curing are used due to the components.

[0106] Additional processing (e.g., sealing, polishing, etc.) may be employed as necessary and/or desired.

[0107] The system of the invention or portions of the system of the invention may be in the form of a "processing machine," such as a general purpose computer, for example. As used herein, the term "processing machine" is to be understood to include at least one processor that uses at least one memory. The at least one memory stores a set of instructions. The instructions may be either permanently or temporarily stored in the memory or memories of the processing machine. The processor executes the instructions that are stored in the memory or memories in order to process data. The set of instructions may include various instructions that perform a particular task or tasks, such as those tasks described above in the flowcharts. Such a set of instructions for performing a particular task may be characterized as a program, software program, or simply software.

[0108] As noted above, the processing machine executes the instructions that are stored in the memory or memories to process data. This processing of data may be in response to commands by a user or users of the processing machine, in response to previous processing, in response to a request by another processing machine and/or any other input, for example.

[0109] The processing machine used to implement the invention may utilize a suitable operating system. Thus, embodiments of the invention may include a processing machine running the Microsoft Windows™ Vista™ operating system, the Microsoft Windows™ XP™ operating system, the Microsoft Windows™ NT™ operating system, the Windows™ 2000 operating system, the Unix operating system, the Linux operating system, the Xenix operating system, the IBM AIX™ operating system, the Hewlett-Packard UX™ operating system, the Novell Netware™ operating system, the Sun Microsystems Solaris™ operating system, the OS/2™ operating system, the BeOS™ operating system, the Macintosh operating system, the Apache operating system, an OpenStep™ operating system or another operating system or platform.

[0110] As described above, a set of instructions may be used in the processing of the invention. The set of instructions may be in the form of a program or software. The software may be in the form of system software or application software, for example. The software might also be in the form of a collection of separate programs, a program module within a larger program, or a portion of a program module, for example The software used might also include modular pro-