ates including propylene carbonate, ethylene carbonate, ethyl methyl carbonate, dimethyl carbonate, diethyl carbonate, and fluoroethylene carbonate. Combinations of solvents can be included, and can include for example, propylene carbonate and ethyl methyl carbonate as an exemplary combination. Any other solvent can be included that enables dissolving the lithium-containing salt or salts as well as other electrolyte component, for example, or can provide useful ionic conductivities, such as greater than or about 5-10 mS/cm.

[0027] In some embodiments, a connection module **230** can electrically couple the rolled electrodes **220** with electronic components within an electronic device that the battery **200** is installed. The connection module **230** can be mounted to the exterior of the housing **210** and include a terminal **232** that can extend through the housing. The terminal **232** can provide a connection point for the rolled electrodes **220** and can be electrically coupled with the rolled electrodes **220** and the connection module **230**.

[0028] FIG. **3** is an illustration of an exploded view of a battery **300** including a housing **310**, rolled electrodes **320**, and a connection module **330** according to some embodiments of the present invention. The battery **300** and its associated components can be representative of the battery **200** shown in FIG. **2**.

[0029] The housing **310** can include a formed base **314** and a lid **316** connected around the perimeter at flange **312** to form a sealed cavity for receiving rolled electrodes **320**. Base **314** can be a shallow tub-shape with a flat bottom extending into sidewalls and generally square-corners. The square-corners and shallow tub-shape can allow for thinner sidewalls than alternative designs (e.g., a tube shape). In some embodiments, base **314** and lid **316** can be made of annealed stainless steel. For example, base **314** or lid **316** can be made of SUS 316L stainless steel with a thickness of 0.075 mm. Base **314** and lid **316** can be attached at flange **312** around the perimeter of housing **310**. Once attached, flange **312** can seal the housing **310** around an interior cavity. The flange **312** can form a hermetic seal around the cavity that can prevent electrolyte, moisture, and gases from leaking out of the cavity. Attachment of base **314** and lid **316** at flange **312** can include welding, crimping, adhesives or a combination of attachment methods.

[0030] In some embodiments, housing **310** includes one or more openings **318**. Opening **318** can be used, for example, to fill the interior of the housing **310** with electrolyte. Opening **318** can additionally or alternatively be used for connecting connection module **330** to rolled electrodes **320** or for attachment points. Cap **319** can be used to cover and seal opening **318**. For example, the cap **319** can seal opening **318** after the electrolyte has been added to the interior of the housing **310**. Cap **319** can be attached to housing **310** to form a hermetic seal that can prevent gases or electrolyte from escaping from the housing **310**.

[0031] The rolled electrodes **320** can provide electrical energy via chemical reaction with the electrolyte. As discussed further below, the rolled electrodes **320** can include one or more anode layers, one or more cathode layers, and a separation layer between the anode and cathode layers. As discussed further above, electrolyte (not shown for ease of illustration) can be added to the interior of housing to react with the rolled electrodes **320**. The reaction between the electrolyte and the rolled electrodes **320** can create electrical energy that can be transmitted to the electronic device. The electrolyte can be retained in the interior of the housing **310** by the sealed flange **312**. The flange **312** can form a hermetic seal around the rolled electrodes **320** and the electrolyte that can prevent the electrolyte and gases inside the housing **310** from leaking out of the housing.

[0032] In some embodiments, the rolled electrodes **320** can include one or more connectors (e.g., positive connector **322** and negative connector **324**). The connectors can include a positive connector **322** and a negative connector **324**. The positive connector **322** and/or the negative connector **324** can align with corresponding connection points on the housing or connect directly to the housing when the rolled electrodes **320** are installed in the battery **300**. For example, the positive connector **322** can align and couple with a connection bar mounted to the interior of the housing **310** and negative connector **324** can couple with the housing **310**. The positive connector **322** can be coupled with connection module **330**. In some embodiments, the positive connector **322** can be coupled with the connection module **330** via a connection bar, as discussed further below. The negative connector **324** can be coupled with housing **310** to electrically connect the rolled electrodes **320** with the housing **310**. The negative connector **324** and the housing **310** can be electrically connected to form a common ground. In some embodiments, the negative connector **324** is coupled with the housing **310** via a connection tab.

[0033] Connection module **330** can be electrically connected with rolled electrodes **320** and provide a variety of functionality. For example, connection module **330** can provide a connection that can provide access to the battery capacity to electronic components. In some embodiments, the connection module **330** can monitor the battery **300** during charging and discharging operations or monitor overall health of the battery **300**. In some embodiments, the connection module **330** can include an application-specific integrated circuit (ASIC), a microcontroller, a circuit board, and/or other circuit elements to perform the desired battery monitoring functions. Various sensors for monitoring the rolled electrodes **320** or other aspects of the battery **300** can be coupled with a processor or other microcontroller within the electronic device and the connection module **330** for receiving power from the battery **300**.

[0034] A connection terminal **332** can extend through housing **310** and provide a connection point for connection module **330**. The connection terminal **332** can electrically couple the connection module **330** with the rolled electrodes **320**. The components of the connection terminal **332** are shown and discussed in more detail in conjunction with FIG. **4** below.

[0035] A connector **334** can extending from connection module **330** to electrically couple the battery **300** with electronic components. For example, connector **334** can electrically couple with electronic components to allow the electronic components to access the battery capacity through connection module **330**. In some embodiments the connector **334** can be or include a board-to-board connector.

[0036] In some embodiments, the connector **334** can be coupled with a coupling **336** which can flexibly extend from the connection module **330**. For example, connector **334** can be at or near a distal end of the coupling **336**. The coupling **336** can allow for electronic components in the electronic device to access the battery capacity through the connection module **330**. The coupling **336** can include flexible components that allow the coupling to bend and fold in multiple