We claim:

1. A prismatic battery cell comprising:

an outer cell case in which the contents of the battery cell are contained, the cell case presenting a pair of opposed, ~~generally~~ planar surfaces interconnected by a plurality of opposed sidewall segment pairs; and

a compressive wrap disposed around the cell case in covering relationship to at least a portion of the planar surfaces and at least a portion of one ~~of the~~ sidewall segment pair of the plurality of sidewall segment pairs, the compressive wrap being operable to constrain hoop stresses acting upon the cell case during thermal expansion of the battery cell,

there being at least one sidewall segment of one of the sidewall segment pair of the plurality of sidewall segment pairs that is uncovered by the compressive wrap and configured to create at least one predetermined point of cell case failure during a thermal event in the battery cell through which ejecta and gas are released from the battery cell.

2. The prismatic battery cell of claim 1, wherein the compressive wrap prevents failure of the cell case at any location on the cell case that is covered by the compressive wrap prior to failure at the at least one predetermined point.

3. The prismatic battery cell of claim 1 or 2, wherein compressive wrap comprises a tensile strength of at least 2.5 MPa.

4. The prismatic battery cell according to any one of claims 1 to 3, wherein the compressive wrap comprises a self-adhesive fiberglass reinforced film.

5. The prismatic battery cell according to any one of claims 1 to 4, wherein the at least one predetermined point of cell case failure is located at the intersection of two adjacent sidewall segments.

6. The prismatic battery cell according to any one of claims 1 to 5, wherein there are two sidewall segments of the one ~~of the~~ sidewall segment pair of the plurality of sidewall segment pairs that are uncovered by the compressive wrap, there being at least one predetermined point of cell case failure formed in each of the two

side wall segments of the one of the sidewall segment pair of the plurality of sidewall segment pairs.

7. The prismatic battery cell according to any one of claims 1 to 6, wherein the battery cell is a lithium ion battery cell.

8. A method of constraining a prismatic battery cell comprising a cell case in which the contents of the battery cell are contained, the cell case presenting a pair of opposed~~, generally~~ planar surfaces interconnected by a plurality of opposed sidewall segment pairs, the method comprising:

applying a compressive wrap to the cell case in covering relationship to at least a portion of the planar surfaces and a least a portion of one ~~of the~~ sidewall segment pair of the plurality of sidewall segment pairs, the compressive wrap functioning to constrain hoop stresses acting upon the cell case during thermal expansion of the battery cell, and

leaving at least one sidewall segment of the one ~~of the~~ sidewall segment pair of the plurality of sidewall segment pairs uncovered by the compressive wrap thereby creating at least one predetermined point of cell case failure during a thermal event in the battery cell through which ejecta and gas are released from the battery cell.

9. The method of claim 8, wherein the compressive wrap is a fiberglass reinforced film that is adhered to the cell case, and prevents failure of the cell case at any location on the cell case that is covered by the compressive wrap prior to failure at the predetermined point.

~~10. The method of claim 8, wherein the compressive wrap prevents failure of the cell case at any location on the cell case that is covered by the compressive wrap prior to failure at the predetermined point.~~

~~11. The method of claim 8, wherein the at least one predetermined point of cell case failure is located at the intersection of two adjacent sidewall segments.~~

~~12. The method of claim 8, wherein there are two sidewall segments of one of the sidewall segment pairs that are left uncovered by the compressive wrap,~~

~~there being at least one predetermined point of cell case failure formed in each of the side wall segments of the one of the sidewall segment pairs.~~

~~13. The method of claim 8, wherein the battery cell is a lithium ion battery cell.~~

~~14.~~10. A battery module assembly comprising:

(1) a battery module housing configured to house a plurality of prismatic battery cells according to any one of claims 1 to 6;

~~at least two battery cells;~~ and

(2) a layered barrier material disposed in between at least two battery cells of the plurality of prismatic battery cells, the layered barrier material ~~therebetween~~ configured to thermally isolate and control or prevent cell-to-cell propagation of a thermal event occurring within at least one of the battery cells, the layered barrier material comprising:

~~the layered barrier material including~~ (i) at least two sheets of an anisotropic material, at least one ~~of the~~ sheet~~s~~ of anisotropic material of the at least two sheets of anisotropic material being in direct facing contact with one ~~of the at least two~~ battery cell~~s, and~~ of the at least two battery cells, and at least one other ~~of the~~ sheet~~s~~ of anisotropic material of the at least two sheets of anisotropic material being in direct facing contact with one other ~~of the at least two~~ battery cell~~s~~, of the at least two battery cells ~~sheets of anisotropic material having a high thermal conductivity in the in-plane direction and operable to direct thermal energy away from a surface of the cell with which the sheet is in contact, the at least two sheets of anisotropic material being operable to prevent and/or retard penetration of a flame originating from the battery cell with which it is in contact in a direction toward the at least one other battery cell,~~;

(ii)~~the layered barrier material~~ optionally ~~including~~ at least two sheets of a thermal insulation material, one sheet of the thermal insulation material ~~having high thermal resistance, one~~ of the at least two sheets of thermal insulation material being positioned in direct

facing contact with one ~~of the at least two~~ sheet~~s~~ of anisotropic material of the at least two sheets of anisotropic material, and the other sheet of thermal insulation material of the at least two sheets of thermal insulation material being positioned in direct facing contact with the other ~~of the at least two~~ sheet~~s~~ of anisotropic material of the at least two sheets of anisotropic material; and~~, the at least two sheets of thermal insulation material being operable to retard and/or impede the flow of heat originating within one of the battery cells in a direction toward the at least one other battery cell,~~

(iii)~~the layered barrier material including~~ a compliant material positioned between the at least two sheets of thermal insulation material under compression, the compliant material being operable for maintaining the at least two sheets of anisotropic material in direct facing contact with the at least two battery cells. ~~regardless of thermally-induced changes in volume that the at least two battery cells may experience during cell operation.~~

~~15. The battery module of claim 14, wherein the anisotropic material comprises graphitic carbon.~~

~~16. The battery module of claim 14, wherein the thermal insulation material comprises cork, wool, or fiberglass.~~

~~17. The battery module of claim 14, wherein the compliant material comprises urethane, EPDM, PVC, or silicone foam.~~

~~18. The battery module of claim 14, wherein the at least two battery cells are lithium ion battery cells.~~

~~19. A method of thermally isolating battery cells within a battery module assembly comprising at least two battery cells, the method comprising:~~

positioning a layered barrier material in between the at least two battery cells, the layered barrier material being configured to thermally isolate and control or prevent cell-to-cell propagation of a thermal event occurring within at least one of the battery cells,

wherein the positioning the layered barrier material comprises

(i) placing a first sheet of anisotropic material in direct facing contact with one of the at least two battery cells, the anisotropic material having a high thermal conductivity in the in-plane direction and operable to direct thermal energy away from a surface of the cell with which the sheet is in contact, the anisotropic material being operable to prevent and/or retard penetration of a flame originating from the battery cell with which it is in contact in a direction toward the at least one other battery cell;

(ii) placing a first sheet of a thermal insulation material having a high thermal resistance in direct facing contact with the first sheet of anisotropic material, the thermal insulation material being operable to retard and/or impede the flow of heat originating within one of the battery cells in a direction toward the at least one other battery cell;

(iii) placing a second sheet of the anisotropic material in direct facing contact with the other of the at least two battery cells;

(iv) placing a second sheet of the thermal insulation material in direct facing contact with the second sheet of anisotropic material; and

(v) positioning a compliant material between the first and second sheets of thermal insulation material and maintaining the compliant material under compression therebetween, the compliant material maintaining the at least two sheets of anisotropic material in direct facing contact with the at least two battery cells regardless of thermally-induced changes in volume that the at least two battery cells may experience during normal cell operation.

20. The method of claim 19, wherein the anisotropic material comprises graphitic carbon.

~~21. The method of claim 19, wherein the thermal insulation material comprises cork, wool, or fiberglass.~~

~~22. The method of claim 19 wherein the compliant material comprises urethane, EPDM, PVC, or silicone foam.~~

~~23. The method of claim 19, wherein the at least two battery cells comprise lithium ion battery cells.~~

~~24. A prismatic battery cell comprising:~~

~~an outer cell case in which the contents of the battery cell are contained, the cell case presenting a pair of opposed, generally planar surfaces interconnected by opposed sidewall segment pairs;~~

~~at least one cell flange extending from one or more of the sidewall segments;~~

~~at least two terminals extending from one or more of the sidewall segments, the at least two terminals being at least partially surrounded by the at least one cell flange; and~~

~~at least one pliable, temperature-resistant strip of material disposed on at least one side of and overlying the at least one cell flange.~~

~~25. The prismatic battery cell of claim 24, wherein the pliable, temperature-resistant strips of material comprise a silicone rubber.~~

~~26. The prismatic battery cell of claim 24, wherein the at least one cell flange extends along the entire length of one of the sidewall segments from which at least one of the terminals extends, the at least one strip of material running the full length of the at least one cell flange and operable to allow for flames, ejecta, and gas to be vented from the cell sidewall segment inboard of the strip of material if the battery cell experiences a runaway thermal event.~~

~~27. The prismatic battery cell of claim 24, wherein the at least one strip of material is operable to protect the battery cell from flame, ejecta, and gas originating external to the battery cell.~~

28. The prismatic battery cell of claim 24, wherein the at least one strip of material comprises a central portion at least partially overlying one of the at least two terminals and outboard portions disposed laterally from the central portion, the central portion having a thickness that is greater than the thickness of the outboard portions.

29. The prismatic battery cell of claim 28, wherein the thickness of the central portion is at least 1.5 times greater than the thickness of the outboard portions.

30. The prismatic battery cell of claim 24, wherein the cell case comprises at least one predetermined point of cell case failure, the at least one predetermined point of cell case failure being located at the intersection of two adjacent sidewall segments and inboard of the at least one strip of material overlying the at least one cell flange.

31. The prismatic battery cell of claim 24, wherein the cell is a lithium ion battery cell.

32. A method of protecting a battery cell from physical and thermal damage, the battery cell comprising an outer cell case in which the contents of the battery cell are contained, the cell case presenting a pair of opposed, generally planar surfaces interconnected by opposed sidewall segment pairs, at least one cell flange extending from one or more of the sidewall segments, and at least two terminals extending from one or more of the sidewall segments, the at least two terminals being at least partially surrounded by the at least one cell flange, the method comprising placing at least one pliable, temperature-resistant strip of material on at least one side of and overlying the at least one cell flange.

33. The method of claim 32, wherein the pliable, temperature-resistant strips of material comprise a silicone rubber.

34. The method of claim 32, wherein the at least one cell flange extends along the entire length of one of the sidewall segments from which at least one of the terminals extends, the at least one strip of material running the full length of the

~~at least one cell flange and operable to allow for flames, ejecta, and gas to be vented from the cell sidewall segment inboard of the strip of material if the battery cell experiences a runaway thermal event.~~

~~35. The method of claim 32, wherein the at least one strip of material is operable to protect the battery cell from flame, ejecta, and gas originating external to the battery cell.~~

~~36. The method of claim 32, wherein at least one strip of material comprises a central portion at least partially overlying one of the at least two terminals and outboard portions disposed laterally from the central portion, the central portion having a thickness that is greater than the thickness of the outboard portions.~~

~~37. The method of claim 36, wherein the thickness of the central portion is at least 1.5 times greater than the thickness of the outboard portions.~~

~~38. The method of claim 32, wherein the cell case comprises at least one predetermined point of cell case failure, the at least one predetermined point of cell case failure being located at the intersection of two adjacent sidewall segments and inboard of the at least one strip of material overlying the at least one cell flange.~~

~~39. The method of claim 32, wherein the cell is a lithium ion battery cell.~~

~~40.~~11. ~~A~~ The battery module assembly of claim 10, wherein the ~~comprising a~~ battery module housing ~~configured to house a plurality of battery cells, the battery module housing~~ comprisinges at least one composite panel comprising an outboard metallic or non-metallic structural layer, an inboard layer of an FR4-rated sheet material, and at least one graphitic carbon sheet positioned therebetween, wherein the composite panel defines at least in part a passageway configured to conduct a flow of ejecta and gas from a thermal event associated with one or more battery cells within the battery module housing toward an outlet formed in the housing, wherein the housing further comprises at least one side panel positioned transversely relative to the composite panel, the outlet being formed in the at least one side panel, and wherein the outlet is normally covered with a rupturable diaphragm configured to open in response

to the thermal event and permit communication between the passageway and the exterior of the housing.

~~41. The battery module assembly of claim 40, wherein the housing further comprises at least one side panel positioned transversely relative to the composite panel, the outlet being formed in the at least one side panel.~~

~~42. The battery module assembly of claim 41, wherein the outlet is normally covered with a rupturable diaphragm configured to open in response to the thermal event and permit communication between the passageway and the exterior of the housing.~~

~~43. The battery module assembly of claim 42, wherein the rupturable diaphragm comprises a synthetic resin film material.~~

~~44. The battery module assembly of claim 40, wherein the outboard structural layer comprises aluminum, carbon fiber, or a synthetic resin material.~~

~~45. The battery module assembly of claim 44, wherein the outboard structural layer comprises aluminum.~~

~~46. The battery module assembly of claim 40, wherein the FR4-rated sheet material comprises a woven fiberglass and epoxy resin laminate material.~~

~~47.~~12. The battery module assembly of claim ~~40~~11, wherein the battery module assembly further comprises one or more busbars operable to connect the plurality of battery cells located within the housing, and one or more busbar shields configured to at least partially cover the one or more busbars and shield electrical components located outboard of the one or more busbars and within the passage from contacting the one or more busbars during a thermal event associated with one or more of the plurality of battery cells.

~~48. The battery module assembly of claim 47, wherein the battery module assembly further comprises one or more busbar shields configured to at least partially cover the one or more busbars and shield electrical components located~~

~~outboard of the one or more busbars and within the passage from contacting the one or more busbars during a thermal event associated with one or more of the plurality of battery cells.~~

~~49. The battery module assembly of claim 48, wherein the one or more busbar shields comprise an FR4-rated sheet material.~~

~~50. The battery module assembly of claim 49, wherein the FR4-rated sheet material comprises a woven fiberglass and epoxy resin laminate material.~~

~~51. The battery module assembly of claim 40, wherein the one or more battery cells comprise lithium ion battery cells.~~

~~52. A battery module assembly comprising:~~

~~a battery module housing configured to house a plurality of battery cells, the battery module housing defining, at least in part, a passageway configured to conduct a flow of ejecta and gas from a thermal event associated with one or more battery cells within the housing toward an outlet formed in the housing;~~

~~one or more busbars operable to connect the plurality of battery cells located within the housing; and~~

~~one or more busbar shields configured to at least partially cover the one or more busbars and shield electrical components located outboard of the one or more busbars and within the passage from contacting the one or more busbars during a thermal event associated with one or more of the plurality of battery cells.~~

~~53. The battery module assembly of claim 52, wherein the one or more busbar shields comprise an FR4-rated sheet material.~~

~~54. The battery module assembly of claim 53, wherein the FR4-rated sheet material comprises a woven fiberglass and epoxy resin laminate material.~~

~~55. A battery module assembly comprising:~~

~~(1) a battery module housing configured to house a plurality of prismatic battery cells, one or more of the prismatic battery cells comprising:~~

~~(i) an outer cell case in which the contents of the battery cell are contained, the cell case presenting a pair of opposed, generally planar surfaces interconnected by opposed sidewall segment pairs;~~

~~(ii) a compressive wrap disposed around the cell case in covering relationship to at least a portion of the planar surfaces and at least a portion of one of the sidewall segment pairs, the compressive wrap being operable to constrain hoop stresses acting upon the cell case during thermal expansion of the cell,~~

~~there being at least one sidewall segment of one of the sidewall segment pairs that is uncovered by the compressive wrap and configured to create at least one predetermined point of cell case failure during a thermal event in the cell through which ejecta and gas are released from the cell; and~~

~~(2) a layered barrier material disposed in between at least two of the plurality of prismatic battery cells, the layered barrier material configured to thermally isolate and control or prevent cell-to-cell propagation of a thermal event occurring within at least one of the battery cells, the layered barrier material comprising~~

~~(i) at least two sheets of an anisotropic material, at least one of the sheets of anisotropic material being in direct facing contact with one of the at least two battery cells, and at least one other of the sheets of anisotropic material being in direct facing contact with one other of the at least two battery cells;~~

~~(ii) optionally at least two sheets of a thermal insulation material, one of the at least two sheets of thermal insulation material being positioned in direct facing contact with one of the at least two sheets of anisotropic material, and the other of the at least two sheets of thermal insulation material being positioned in direct facing contact with the other of the at least two sheets of anisotropic material; and~~

(iii) a compliant material positioned between the at least two sheets of thermal insulation material under compression, the compliant material being operable for maintaining the at least two sheets of anisotropic material in direct facing contact with the at least two battery cells.

56. The battery module assembly of claim 55, wherein the at least two sheets of anisotropic material have a high thermal conductivity in the in-plane direction and are operable to direct thermal energy away from a surface of the cell with which the sheet is in contact, the at least two sheets of anisotropic material are operable to prevent and/or retard penetration of a flame originating from the battery cell with which it is in contact in a direction toward the at least one other battery cell.

57. The battery module assembly of claim 55, wherein the anisotropic material comprises graphitic carbon.

58. The battery module assembly of claim 55, wherein the at least two sheets of thermal insulation material are operable to retard and/or impede the flow of heat originating within one of the battery cells in a direction toward the at least one other battery cell.

59. The battery module assembly of claim 55, wherein the thermal insulation material comprises cork, wool, or fiberglass.

60. The battery module assembly of claim 55, wherein the compliant material is operable for maintaining the at least two sheets of anisotropic material in direct facing contact with the at least two of the plurality of battery cells regardless of thermally-induced changes in volume that the at least two of the plurality of battery cells may experience during normal cell operation.

61. The battery module assembly of claim 55, wherein the compliant material comprises urethane, EPDM, PVC, or silicone foam.

62. The battery module assembly of claim 55, wherein the plurality of battery cells comprises lithium ion battery cells.

~~63. The battery module assembly of claim 55, wherein the compressive wrap prevents failure of the cell case at any location on the cell case that is covered by the compressive wrap prior to failure at the at least one predetermined point.~~

~~64. The battery module assembly of claim 55, wherein compressive wrap comprises a tensile strength of at least 2.5 MPa.~~

~~65. The battery module assembly of claim 55, wherein the compressive wrap comprises a self-adhesive fiberglass reinforced film.~~

~~66. The battery module assembly of claim 55, wherein the at least one predetermined point of cell case failure is located at the intersection of two adjacent sidewall segments.~~

~~67. The battery module assembly of claim 55, wherein there are two sidewall segments of one of the sidewall segment pairs that are uncovered by the compressive wrap, there being at least one predetermined point of cell case failure formed in each of the side wall segments of the one of the sidewall segment pairs.~~

~~68. The battery module assembly of claim 55, wherein the battery module housing comprises at least one composite panel comprising an outboard metallic or non-metallic structural layer, an inboard layer of an FR4-rated sheet material, and at least one graphitic carbon sheet positioned therebetween, wherein the composite panel defines at least in part a passageway configured to conduct a flow of ejecta and gas from a thermal event associated with one or more battery cells within the battery module housing toward an outlet formed in the housing.~~

~~69. The battery module assembly of claim 68, wherein the housing further comprises at least one side panel positioned transversely relative to the composite panel, the outlet being formed in the at least one side panel.~~

~~70. The battery module assembly of claim 69, wherein the outlet is normally covered with a rupturable diaphragm configured to open in response to the~~

~~thermal event and permit communication between the passageway and the exterior of the housing.~~

~~71. The battery module assembly of claim 70, wherein the rupturable diaphragm comprises a synthetic resin film material.~~

~~72. The battery module assembly of claim 68, wherein the outboard structural layer comprises aluminum, carbon fiber, or a synthetic resin material.~~

~~73. The battery module assembly of claim 72, wherein the outboard structural layer comprises aluminum.~~

~~74. The battery module assembly of claim 68, wherein the FR4-rated sheet material comprises a woven fiberglass and epoxy resin laminate material.~~

~~75. The battery module assembly of claim 68, wherein the battery module assembly further comprises one or more busbars operable to connect the plurality of battery cells located within the housing.~~

~~76. The battery module assembly of claim 75, wherein the battery module assembly further comprises one or more busbar shields configured to at least partially cover the one or more busbars and shield electrical components located outboard of the one or more busbars and within the passage from contacting the one or more busbars during a thermal event associated with one or more of the plurality of battery cells.~~

~~77. The battery module assembly of claim 76, wherein the one or more busbar shields comprise an FR4-rated sheet material.~~

~~78. The battery module assembly of claim 77, wherein the FR4-rated sheet material comprises a woven fiberglass and epoxy resin laminate material.~~

~~79.~~13. The battery module assembly according to any one of claims 10 to ~~55~~12, wherein each of the plurality of battery cells comprises at least one cell flange extending from one or more of the sidewall segments, at least two terminals extend from one or more of the sidewall segments, the at least two terminals being at least

partially surrounded by the at least one cell flange, there being at least one pliable, temperature-resistant strip of material disposed on at least one side of and overlying the at least one cell flange.

~~80.~~14. The battery module assembly according to any one of claims 10 to 13 ~~79~~, wherein the layered barrier material comprises the at least two sheets of anisotropic material, the at least two sheets of thermal insulation material, and the compliant material~~at least one pliable, temperature-resistant strip of material comprises a silicone rubber~~.

~~81. The battery module assembly of claim 79, wherein the at least one cell flange extends along the entire length of one of the sidewall segments from which at least one of the terminals extends, the at least one strip of material running the full length of the at least one cell flange and operable to allow for flames, ejecta, and gas to be vented from the cell sidewall segment inboard of the at least one strip of material if the battery cell experiences a runaway thermal event.~~

~~82. The battery module assembly of claim 79, wherein the at least one strip of material is operable to protect the battery cell from flame, ejecta, and gas originating external to the battery cell.~~

~~83. The battery module assembly of claim 79, wherein the at least one strip of material comprises a central portion at least partially overlying one of the at least two terminals and outboard portions disposed laterally from the central portion, the central portion having a thickness that is greater than the thickness of the outboard portions.~~

~~84. The battery module assembly of claim 83, wherein the thickness of the central portion is at least 1.5 times greater than the thickness of the outboard portions.~~

~~85. The battery module assembly of claim 79, wherein the at least one predetermined point of cell case failure being located inboard of the at least one strip of material overlying the at least one cell flange.~~

86. A battery module assembly comprising a battery module housing configured to house a plurality of prismatic battery cells, one or more of the prismatic battery cells comprising:

an outer cell case in which the contents of the battery cell are contained, the cell case presenting a pair of opposed, generally planar surfaces interconnected by opposed sidewall segment pairs;

a compressive wrap disposed around the cell case in covering relationship to at least a portion of the planar surfaces and at least a portion of one of the sidewall segment pairs, the compressive wrap being operable to constrain hoop stresses acting upon the cell case during thermal expansion of the cell, there being at least one sidewall segment of one of the sidewall segment pairs that is uncovered by the compressive wrap and configured to create at least one predetermined point of cell case failure during a thermal event in the cell through which ejecta and gas are released from the cell;

at least one cell flange extending from one or more of the sidewall segments;

at least two terminals extending from one or more of the sidewall segments, the at least two terminals being at least partially surrounded by the at least one cell flange; and

at least one pliable, temperature-resistant strip of material disposed on at least one side of and overlying the at least one cell flange.

87. A battery module assembly comprising

a battery module housing configured to house a plurality of battery cells;

a layered barrier material disposed in between at least two of the plurality of battery cells, the layered barrier material configured to thermally isolate and control or prevent cell-to-cell propagation of a thermal event occurring within at least one of the battery cells, the layered barrier material comprising:

(i) at least two sheets of an anisotropic material, at least one of the sheets of anisotropic material being in direct facing contact with one of the at least two battery cells, and at least one other of the

sheets of anisotropic material being in direct facing contact with one other of the at least two battery cells;

(ii) optionally at least two sheets of a thermal insulation material, one of the at least two sheets of thermal insulation material being positioned in direct facing contact with one of the at least two sheets of anisotropic material, and the other of the at least two sheets of thermal insulation material being positioned in direct facing contact with the other of the at least two sheets of anisotropic material; and

(iii) a compliant material positioned between the at least two sheets of thermal insulation material under compression, the compliant material being operable for maintaining the at least two sheets of anisotropic material in direct facing contact with the at least two battery cells;

each of the plurality of battery cells comprising an outer cell case in which the contents of the battery cell are contained, the cell case presenting a pair of opposed, generally planar surfaces interconnected by opposed sidewall segment pairs;

at least one cell flange extending from one or more of the sidewall segments;

at least two terminals extending from one or more of the sidewall segments, the at least two terminals being at least partially surrounded by the at least one cell flange; and

at least one pliable, temperature-resistant strip of material disposed on at least one side of and overlying the at least one cell flange.

88. A battery module assembly comprising:

a battery module housing configured to house a plurality of prismatic battery cells, one or more of the prismatic battery cells comprising:

(i) an outer cell case in which the contents of the battery cell are contained, the cell case presenting a pair of opposed, generally planar surfaces interconnected by opposed sidewall segment pairs;

(ii) a compressive wrap disposed around the cell case in covering relationship to at least a portion of the planar surfaces and at least a portion of one of the sidewall segment pairs, the compressive wrap being operable to constrain hoop stresses acting upon the cell case during thermal expansion of the cell, there being at least one sidewall segment of one of the sidewall segment pairs that is uncovered by the compressive wrap and configured to create at least one predetermined point of cell case failure during a thermal event in the cell through which ejecta and gas are released from the cell;

the battery module housing comprising at least one composite panel comprising an outboard metallic or non-metallic structural layer, an inboard layer of an FR4-rated sheet material, and at least one graphitic carbon sheet positioned therebetween,

wherein the composite panel defines at least in part a passageway configured to conduct a flow of ejecta and gas from a thermal event associated with one or more battery cells within the battery module housing toward an outlet formed in the housing.

89. A battery module assembly comprising:

a battery module housing having a longitudinal axis that extends the length of the battery module housing and a transverse axis that is normal to the longitudinal axis;

a plurality of battery cells located within the battery module housing; and

a layered barrier material comprising at least two sheets of anisotropic material, at least one of the sheets of anisotropic material being in direct facing contact with one of the battery cells, and at least one other of the sheets of anisotropic material being in direct facing contact with at least one other of the battery cells,

wherein the battery module housing is configured to apply a compressive force to the plurality of battery cells in a direction parallel to the transverse axis, and

~~wherein a compressive force is applied to the plurality of battery cells in a in a direction that is parallel to the longitudinal axis.~~

~~90. A prismatic battery cell assembly comprising:~~

~~an outer cell case in which the contents of the battery cell are contained, the cell case having a pair of opposed, generally planar surfaces interconnected by opposed sidewall segment pairs;~~

~~at least one cell flange extending from one or more of the sidewall segments;~~

~~at least two terminals extending from one of the sidewall segments, the at least two terminals being at least partially surrounded by the at least one cell flange; and~~

~~a bead of a pliable, temperature-resistant material disposed about a majority of the periphery of the sidewall segments and overlying at least a portion of the at least one cell flange, the bead being operable to apply a compressive force to the outer cell case.~~

~~91. A battery module assembly comprising:~~

~~a battery module housing;~~

~~a plurality of battery cells located within the battery module housing; and~~

~~at least one passageway located between the battery module housing and the plurality of battery cells, the at least one passageway being configured to conduct a flow of ejecta and gas from a thermal event associated with one or more battery cells within the battery module housing toward an outlet formed in the housing, wherein the outlet is covered with a rupturable diaphragm configured to open in response to the thermal event and permit communication between the passageway and the exterior of the housing, the rupturable diaphragm also being configured to resist opening due to a thermal event that is external to the housing.~~

~~92.~~15. A vehicle comprising a prismatic battery cell according to any of claims 1~~-~~ to 7 ~~and 24-31~~ or ~~the~~ a ~~prismatic~~ battery module ~~cell~~ assembly according to any one of claims ~~90~~10 to 14.

~~93. The vehicle according to claim 92, wherein the vehicle is a marine vessel.~~

~~94. A vehicle comprising a battery module assembly according to any of claims 14-18, 40-89, and 91.~~

~~95. The vehicle according to claim 94, wherein the vehicle is a marine vessel.~~