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(71) Applicant: **ASPEN AEROGELS, INC.** [US/US]; 30
Forbes Road, Building B, Northborough, Massachusetts
01532 (US).

(72) Inventors: **WILLIAMS, John**; 143 Lowell Road, Groton,
Massachusetts 01450 (US). **EVANS, Owen**; 2 Sonora Drive,
Chelmsford, Massachusetts 01824 (US). **BAUR, David**;
17 Voyagers Lane, Ashland, Massachusetts 01721 (US).
GOULD, George; 174 Millvile Road, Mendon, Massachu-
setts 01756 (US). **DEKRAFFT, Kathryn**; 47 Lake Street,
Hudson, Massachusetts 01749 (US). **MIHALCIK, David**;
114 Brigham Street, Northborough, Massachusetts 01532
(US). **NAM, Younggyu**; 13 Irving Street, Medford, Massa-
chusetts 02155 (US). **CAHILL, Brian**; Bothar an Chomain,
Loughanbeg, Inverin, H91 CX7N (IE). **HENNEMUTH, Robert**;
2 Hennessey Drive, Franklin, Massachusetts 02038
(US).

(74) Agent: **DELUCA, Mark R.** et al.; WOMBLE BOND
DICKINSON (US) LLP, PO Box 570489, Atlanta, Georgia
30357 (US).

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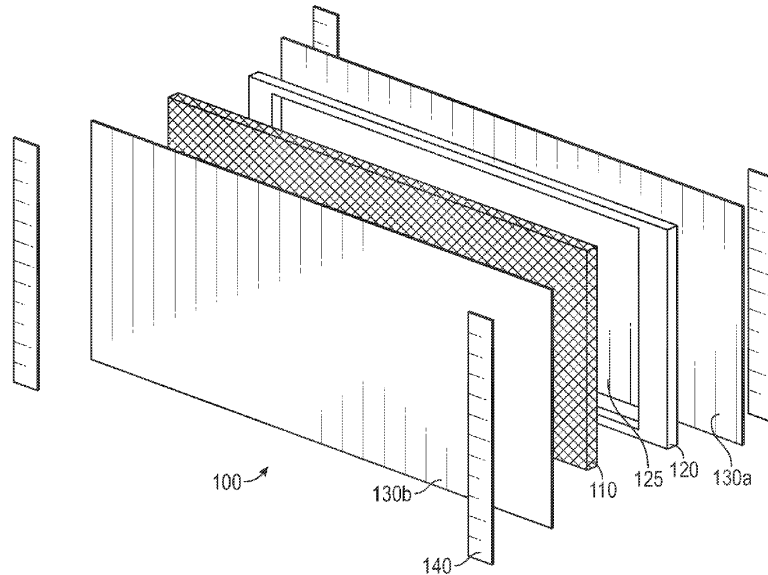


FIG. 1

(57) Abstract: The present disclosure relates to materials and systems to manage thermal runaway issues in energy storage systems. Exemplary embodiments include an insulation layer that is encapsulated to form an insulation barrier. A support member is placed around at least a portion of an insulation layer. The support member provides a support for the insulation layer, allowing the insulation layer to be easily encapsulated and installed in a battery module or pack.

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