tests performed on the at least one battery pack and the associated components at various stages, unique identifiers of the at least one battery pack and the associated components, thresholds used for performing the tests and rules defined for assembling the at least one battery pack.

[006] Another object of embodiments herein is to disclose methods and systems for monitoring, tracing and managing the at least one battery pack using the at least one digital copy and data received from the at least one battery pack when the at least one digital copy is deployed in at least one field.

[007] These and other aspects of the embodiments herein will be better appreciated and understood when considered in conjunction with the following description and the accompanying drawings. It should be understood, however, that the following descriptions, while indicating at least one embodiment and numerous specific details thereof, are given by way of illustration and not of limitation. Many changes and modifications may be made within the scope of the embodiments herein without departing from the spirit thereof, and the embodiments herein include all such modifications.

## BRIEF DESCRIPTION OF FIGURES

[008] Embodiments herein are illustrated in the accompanying drawings, throughout which like reference letters indicate corresponding parts in the various figures. The embodiments herein will be better understood from the following description with reference to the drawings, in which:

[009] FIG. 1 depicts a battery pack management system, according to embodiments as disclosed herein;

[0010] FIGs. 2a and 2b depict a battery pack management system, according to embodiments as disclosed herein;

[0011] FIG. 3 is an example diagram illustrating various modules of the digital controller for creating the digital copy of the battery pack and managing the battery pack when the battery pack is deployed in the at least one field, according to embodiments as disclosed herein; and