What is claimed is:

CLAIMS

1. A method of applying a seal to an end-block of an electrochemical separation device, the method comprising:

disposing sections of an internal seal in a jig having cutouts configured to retain the sections of the internal seal, the sections of the internal seal formed of a first material;

placing a sub-block of the electrochemical separation device including a channel portion and a frame on the jig;

adhering the sections of the internal seal to the channel portion on a side of the sub-block;

removing the sub-block from the jig; and

applying an external seal to the frame on the side of the sub-block, the external seal formed of a second material including at least one material parameter different from the first material, further comprising disposing sections of volume displacement material within the jig between adjacent sections of the internal seal, further comprising adhering the sections of volume displacement material to the channel portion on the side of the sub-block.