CLAIMS

1. A method of facilitating uniform fluid flow distribution in an electrochemical separation apparatus having a cell stack comprising a plurality of alternating ion depleting compartments and ion concentrating compartments, the method comprising:

providing a first flow distribution system in fluid communication with the cell stack, the first flow distribution system comprising a first ramp to promote the redirection of fluid flow into the cell stack;

further comprising providing an inlet manifold associated with the first flow distribution system,

wherein providing the first flow distribution system comprises providing an inlet manifold having an injection molded first flow distribution system.