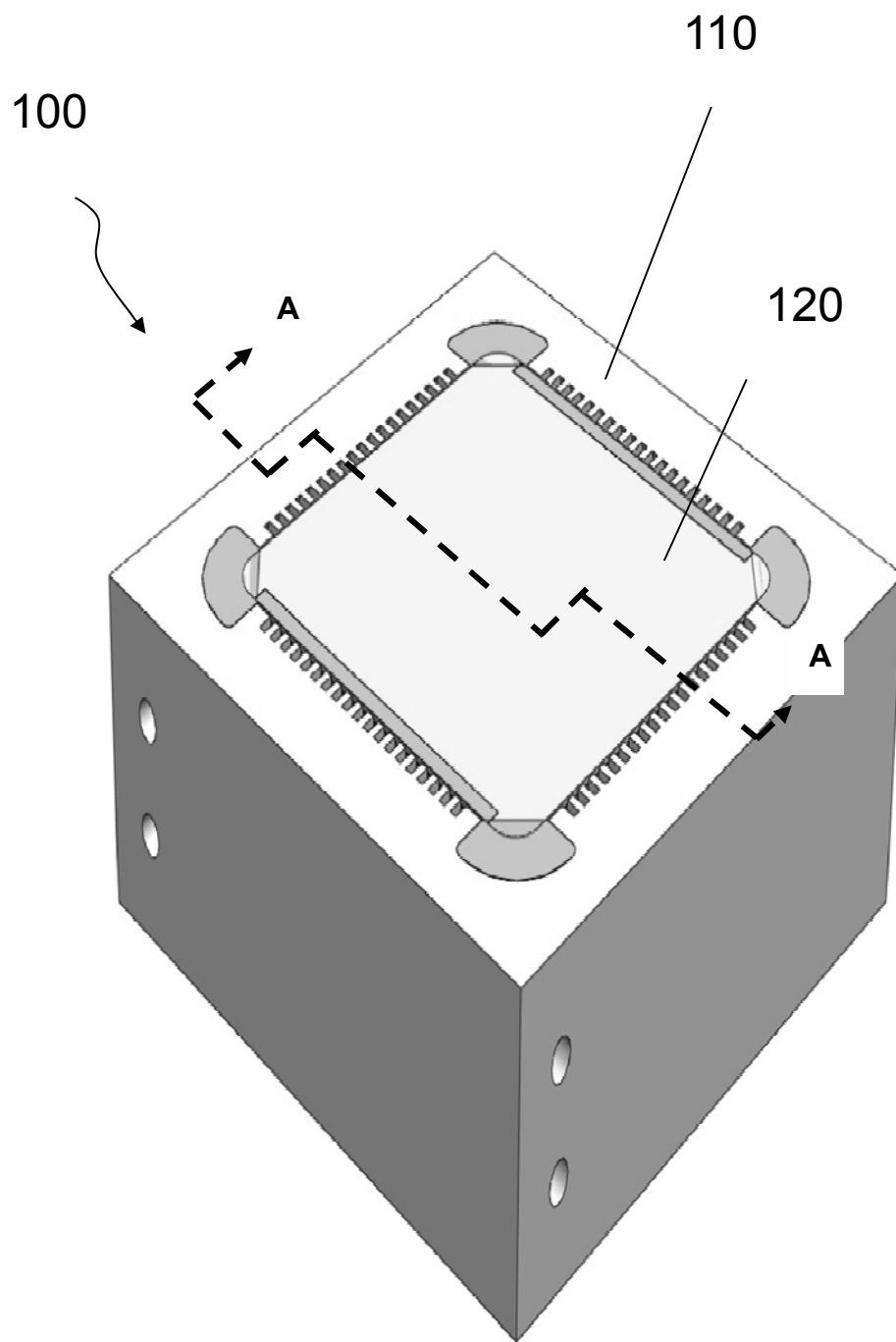
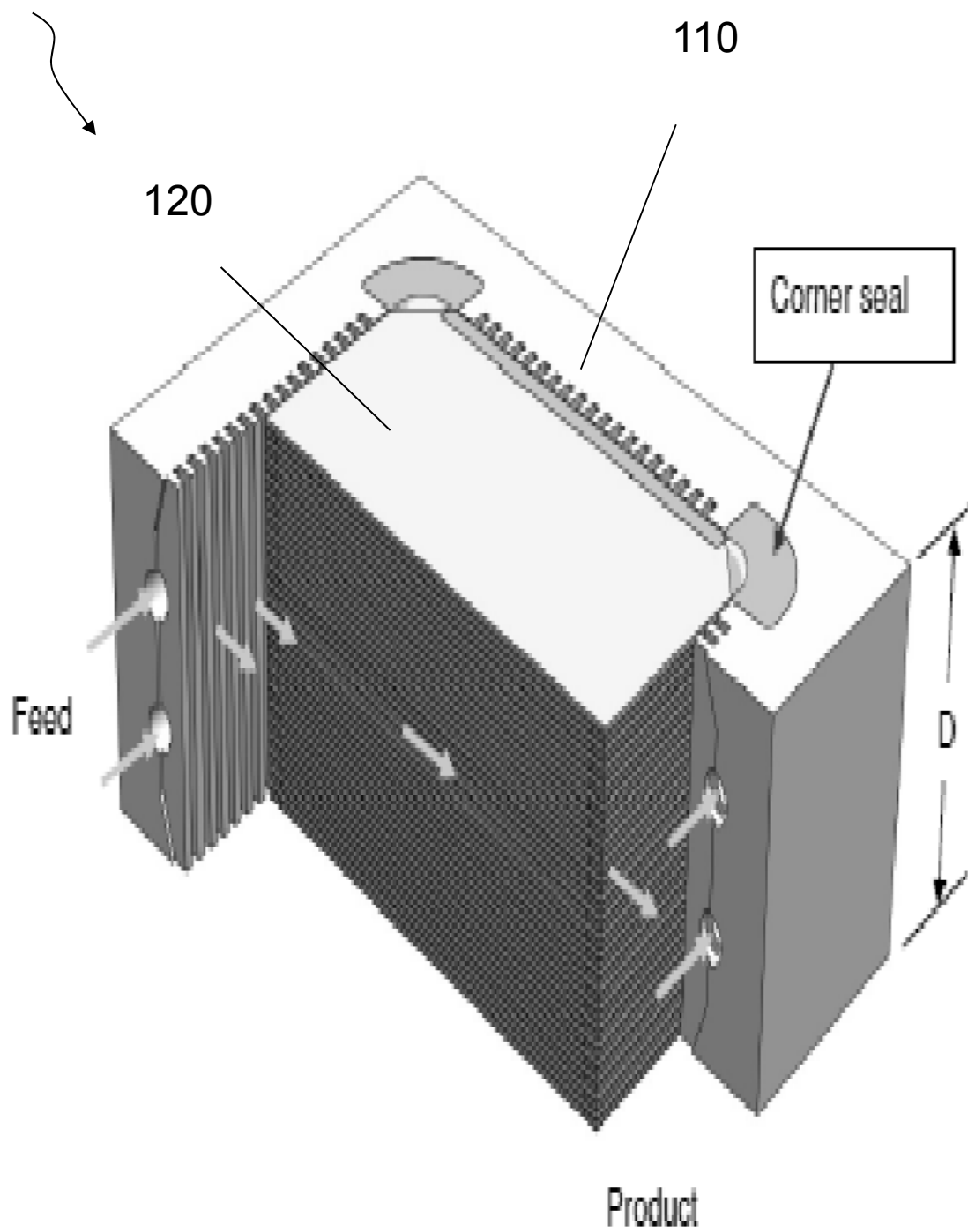
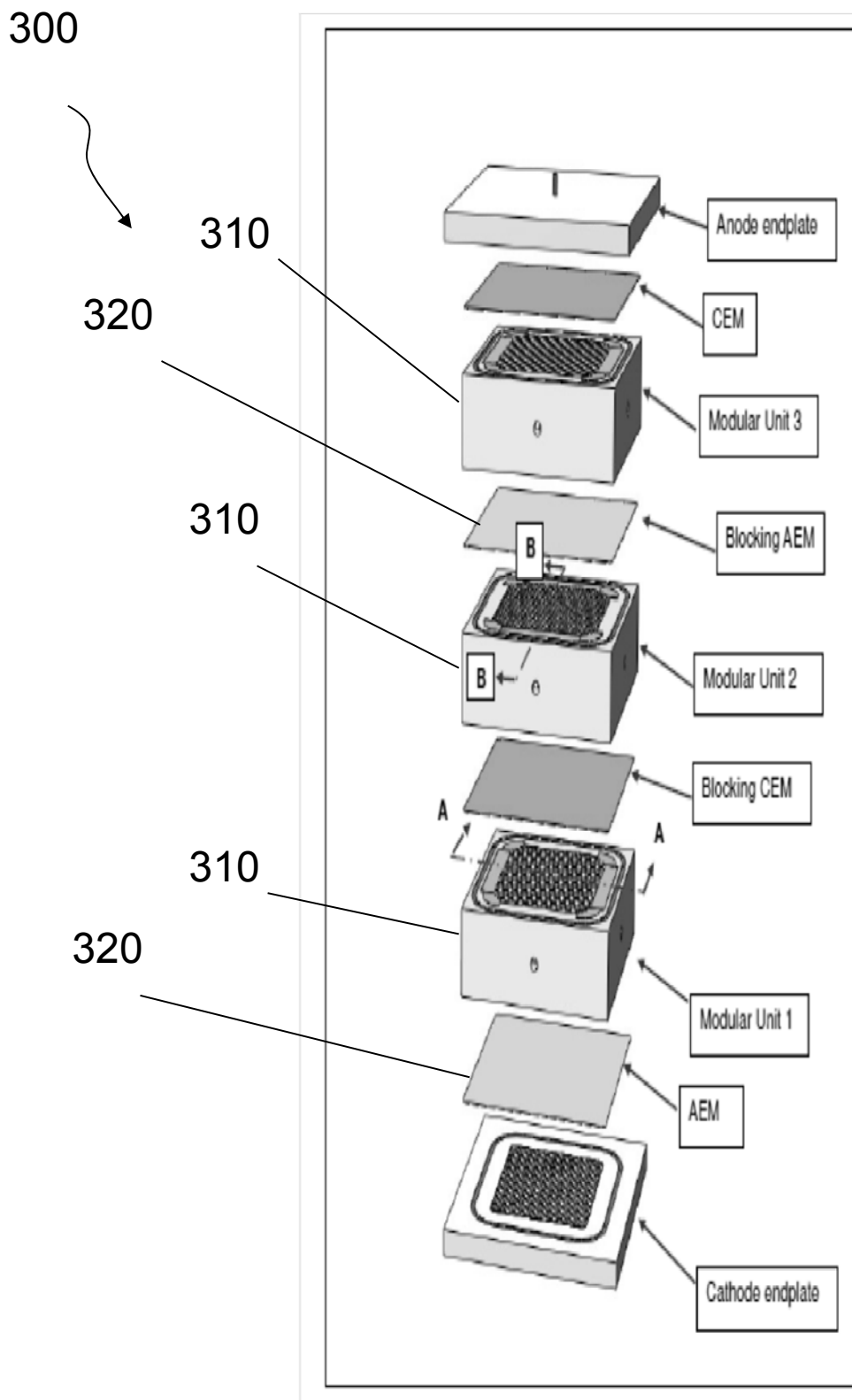


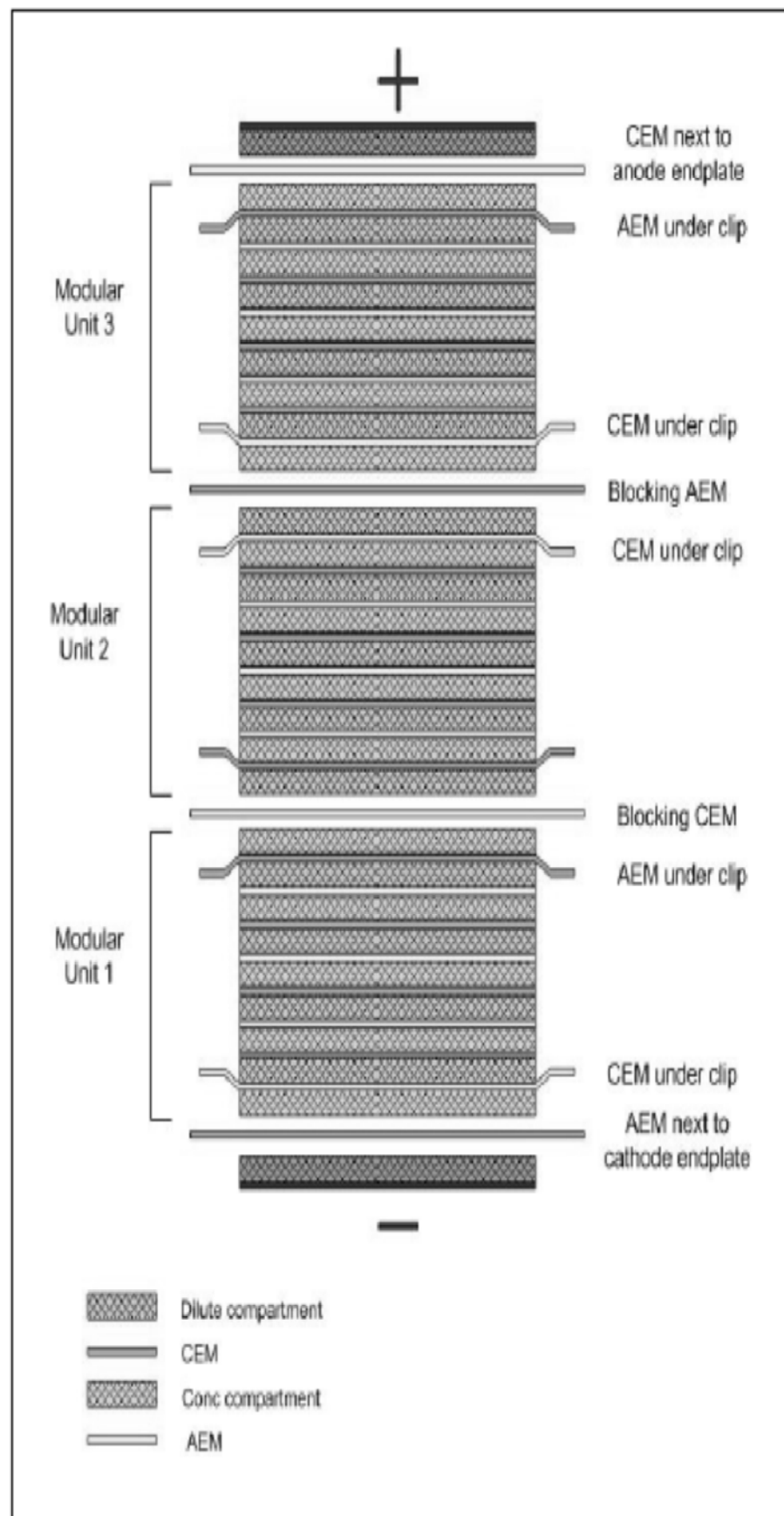
**FIG. 1**

100

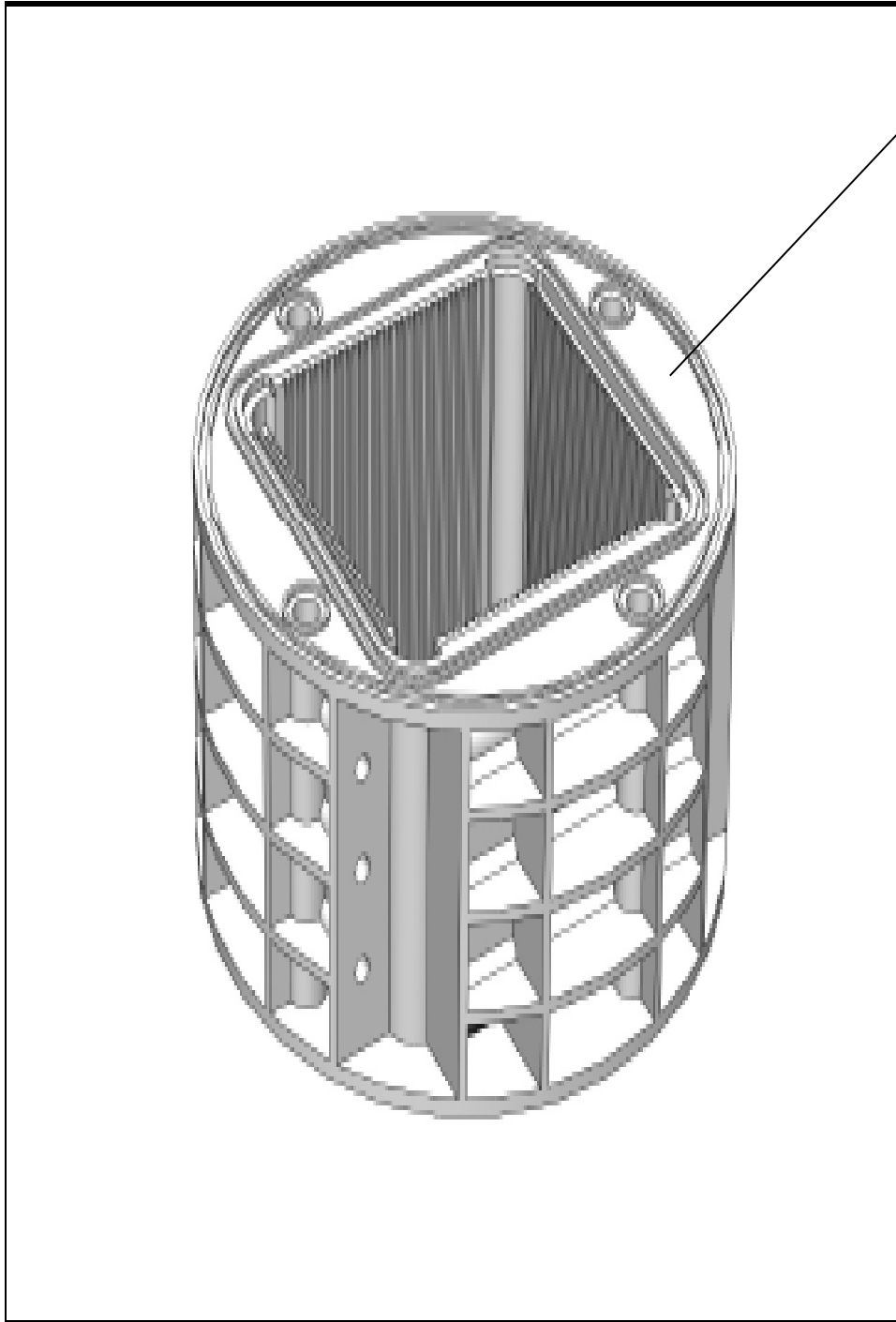
**FIG. 2**

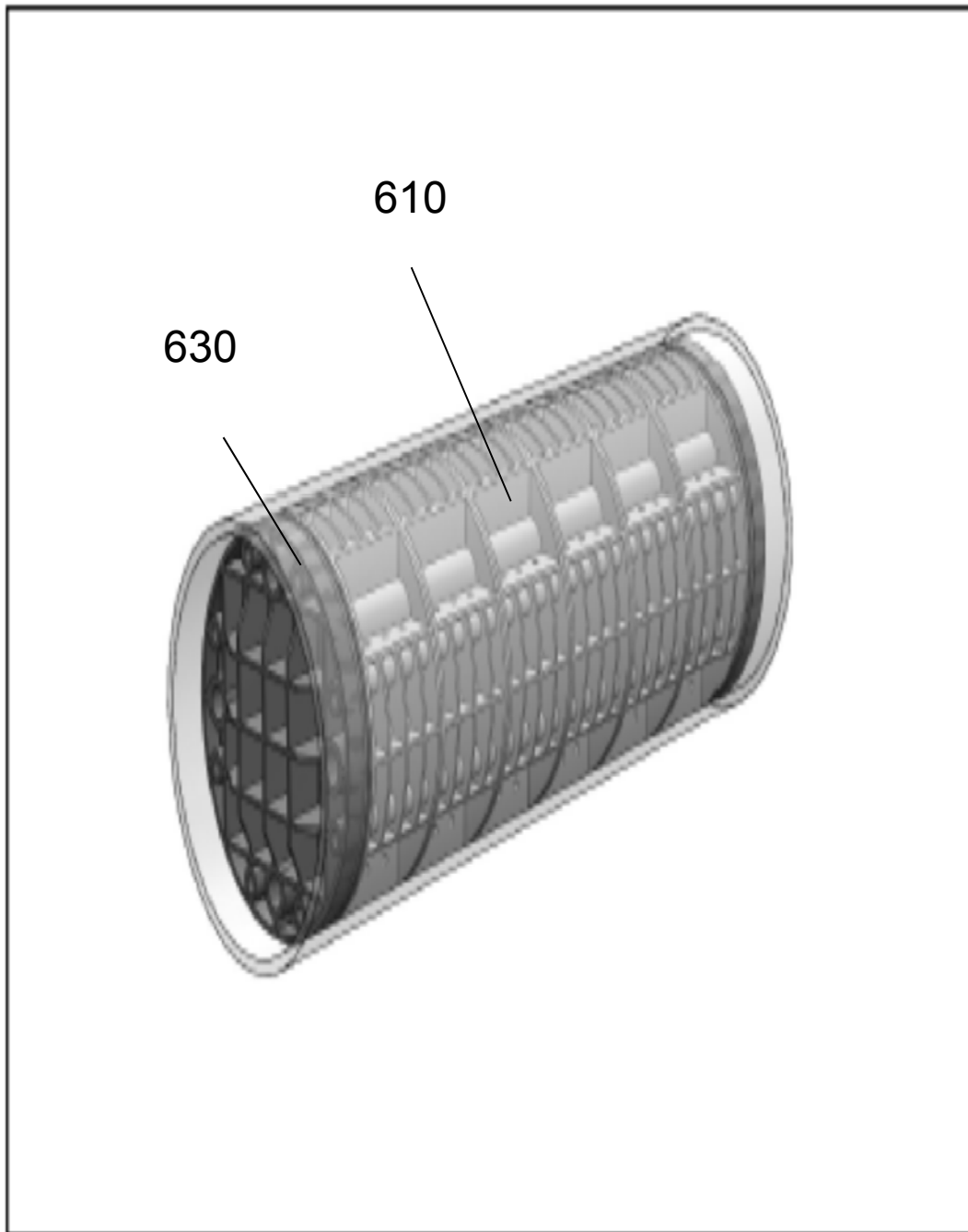
**FIG. 3**

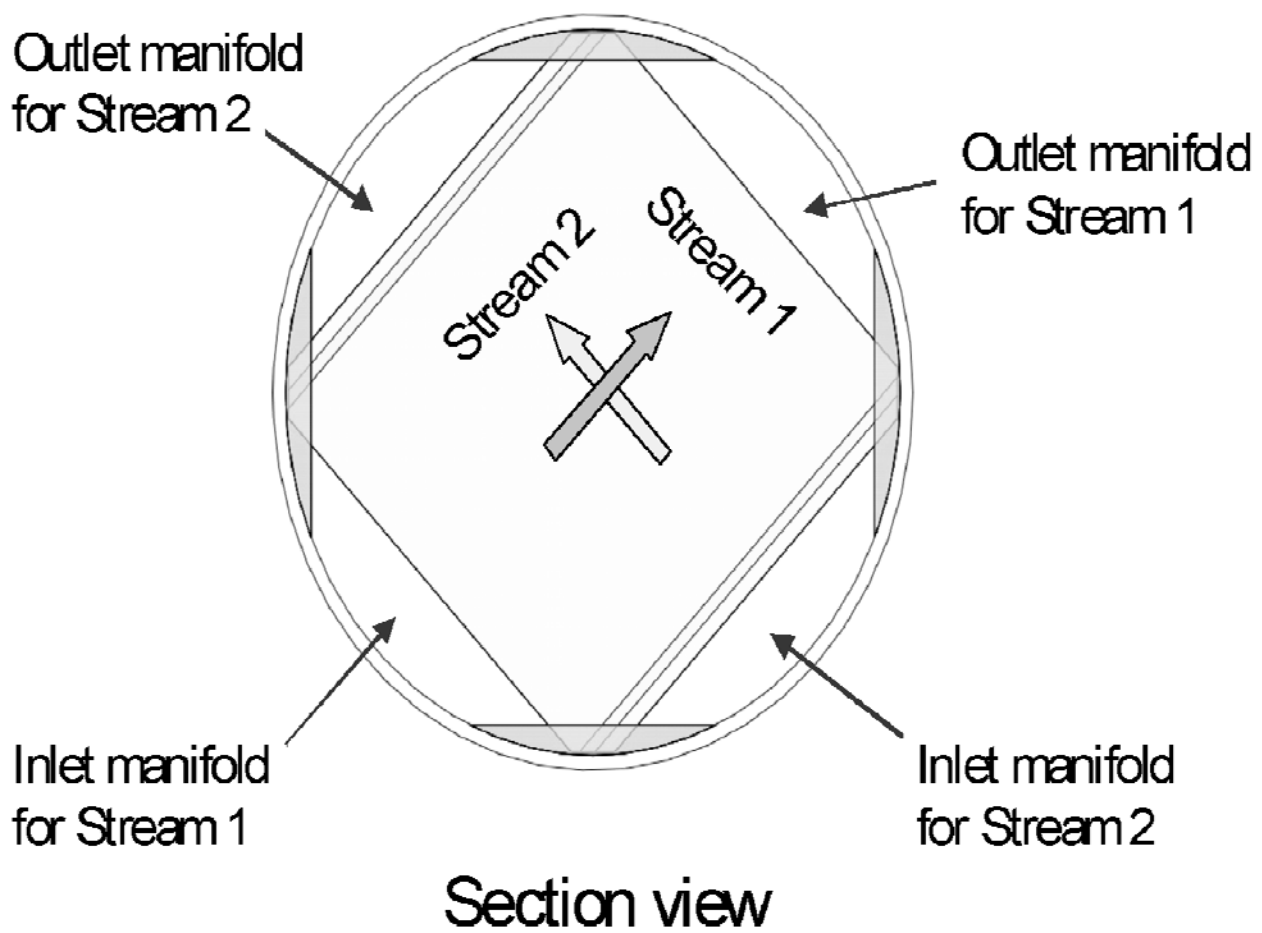
400

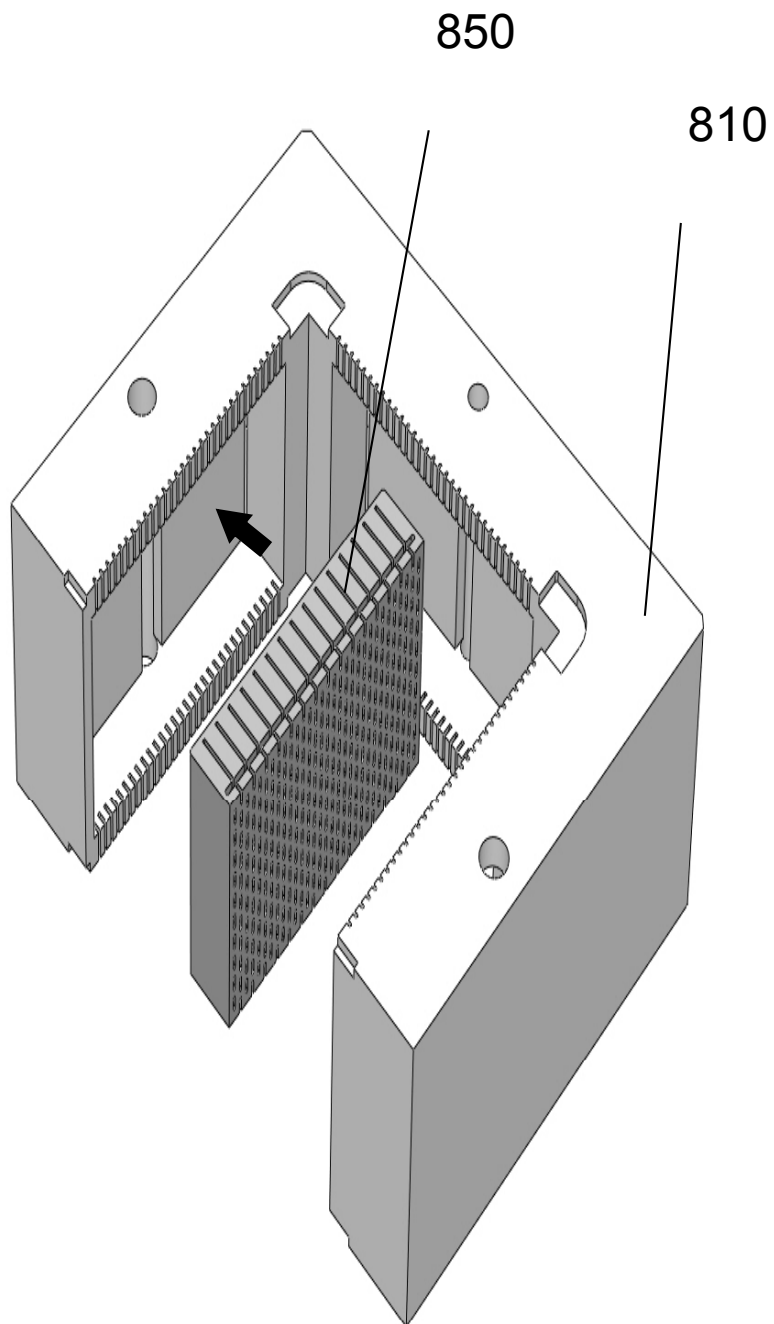
**FIG. 4**

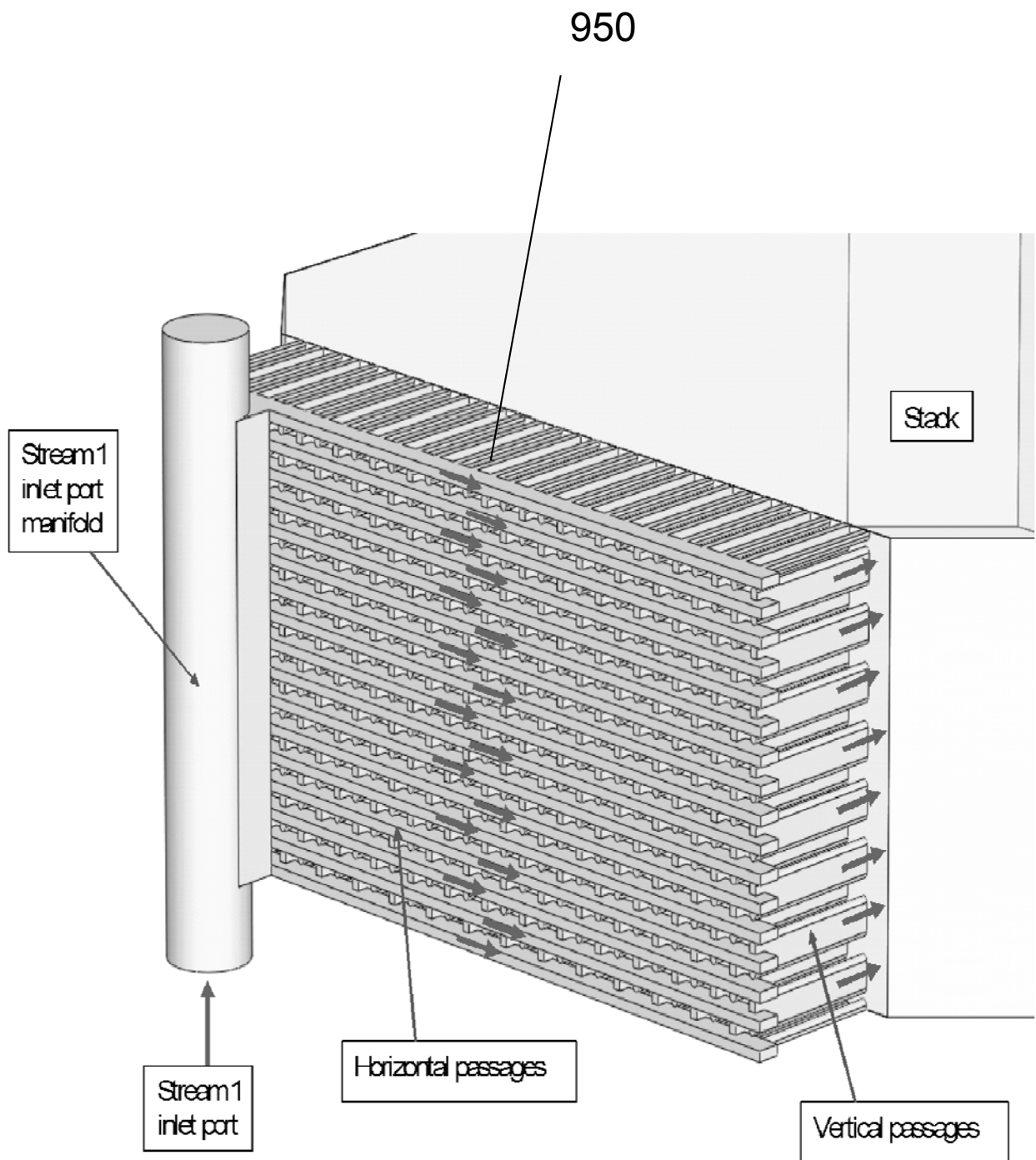
510

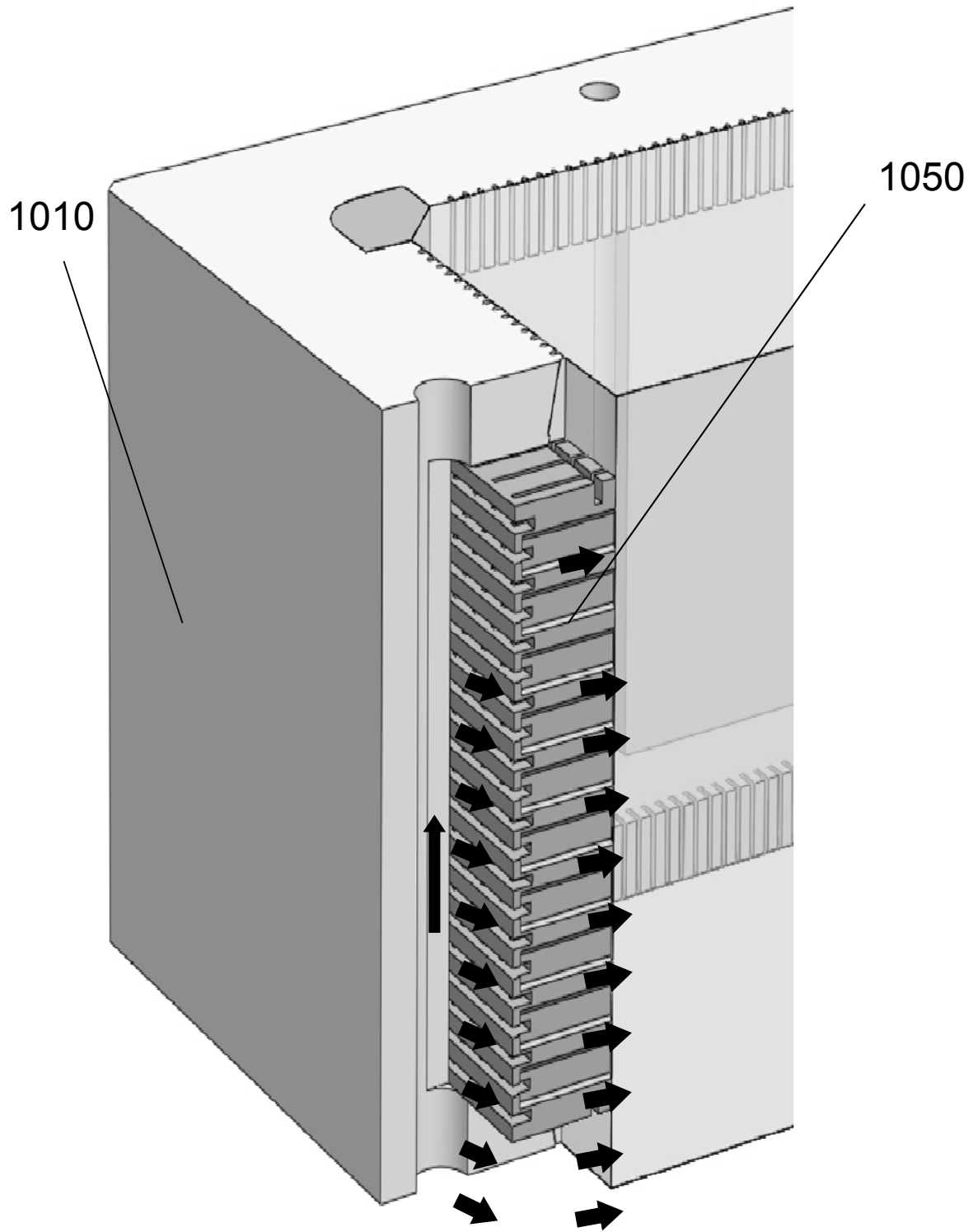
**FIG. 5**

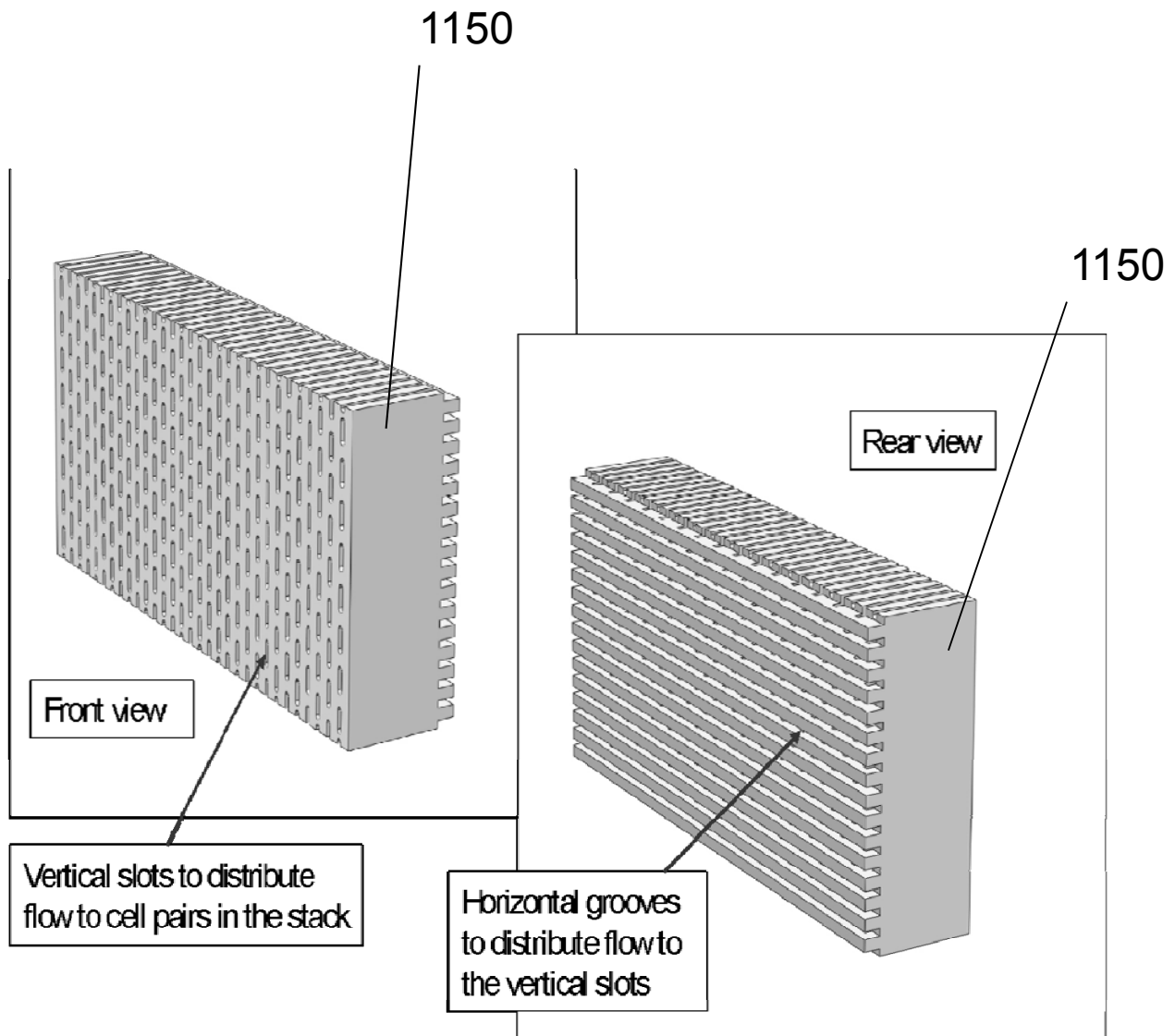
**FIG. 6**

**FIG. 7**

**FIG. 8**

**FIG. 9**

**FIG. 10**

**FIG. 11**

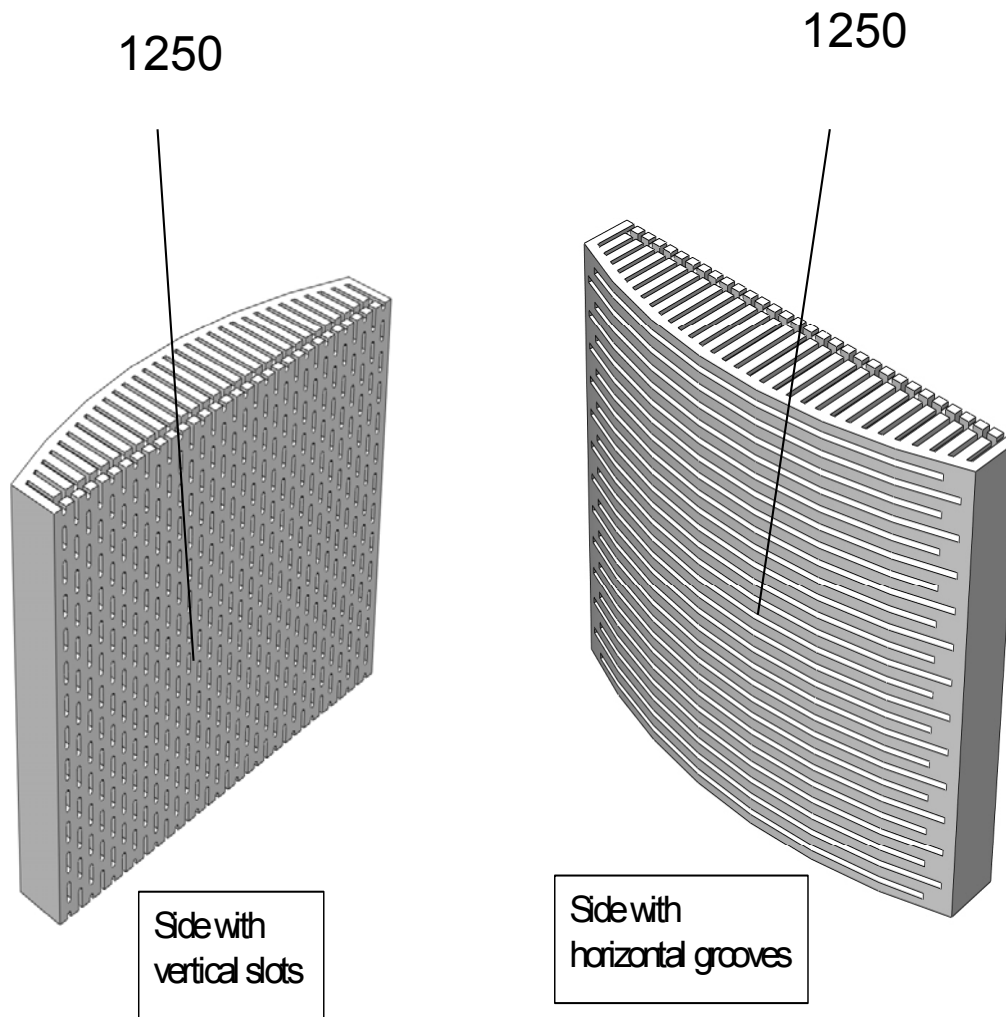
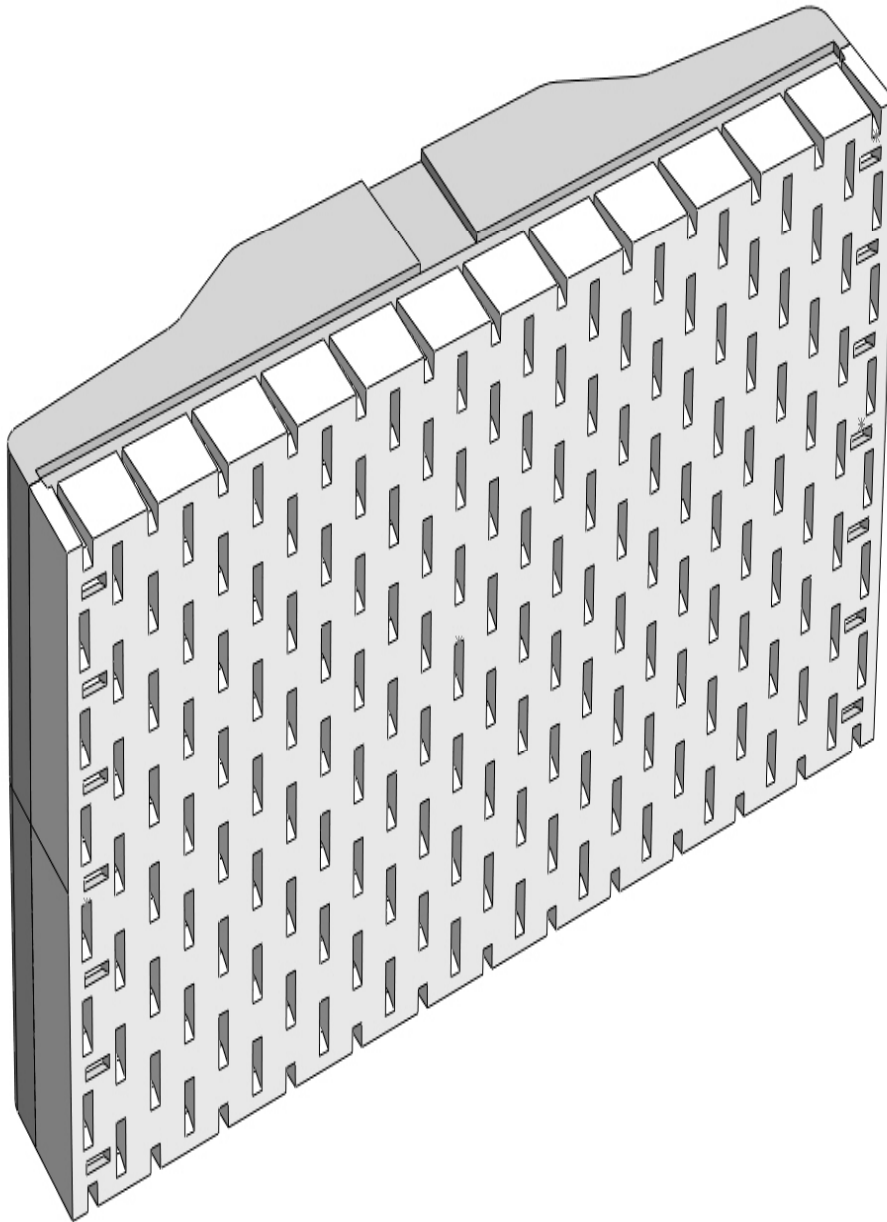
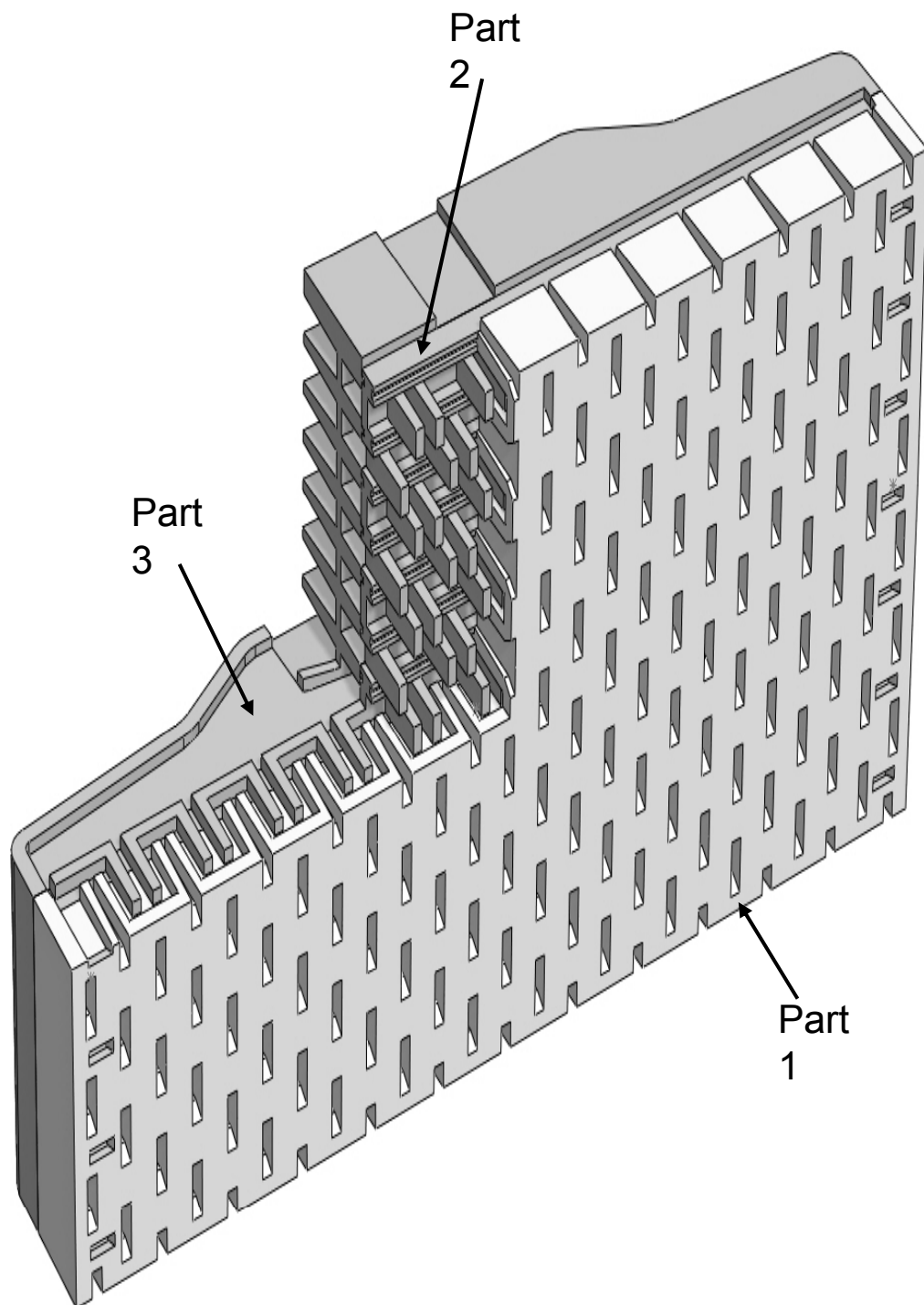
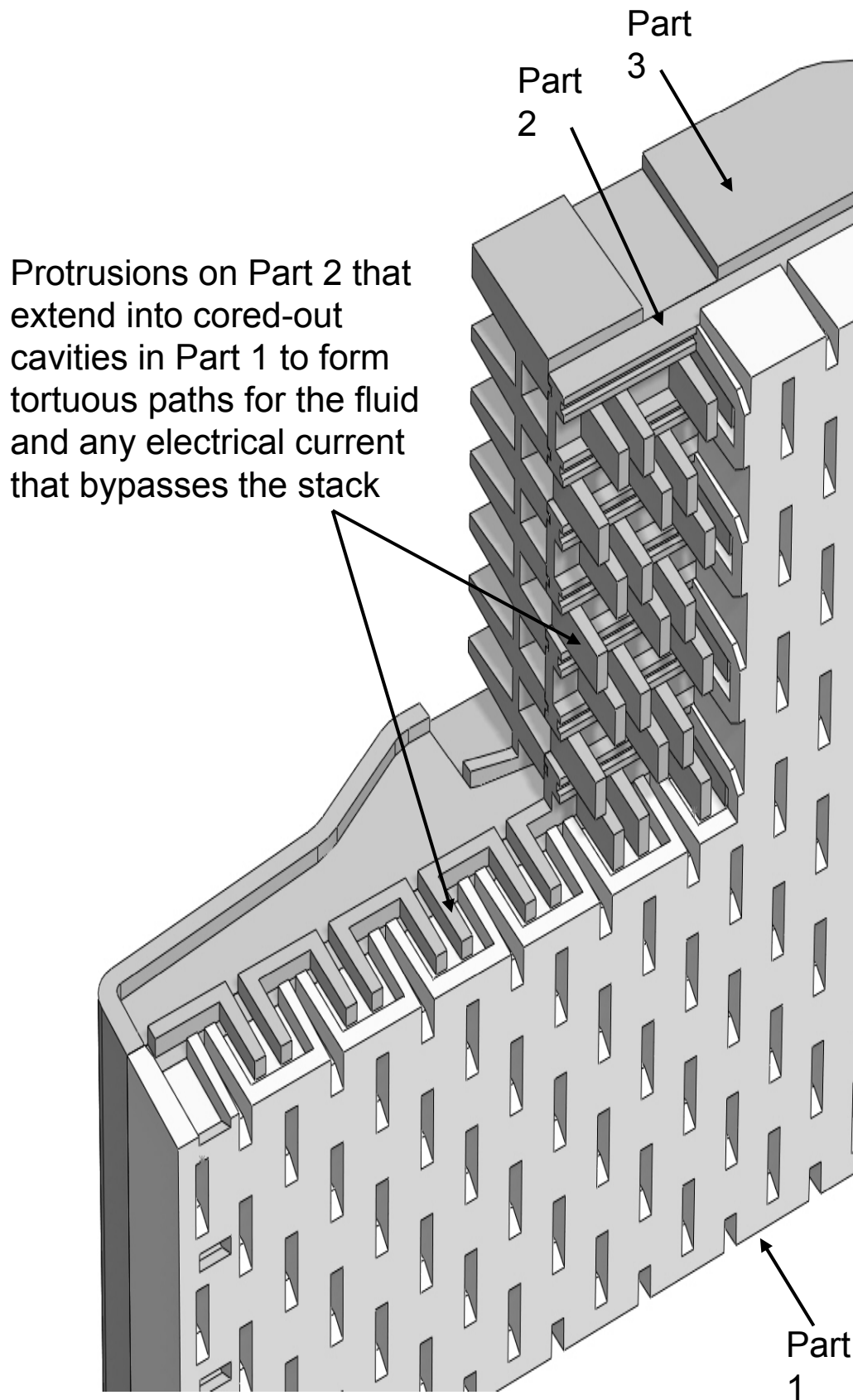
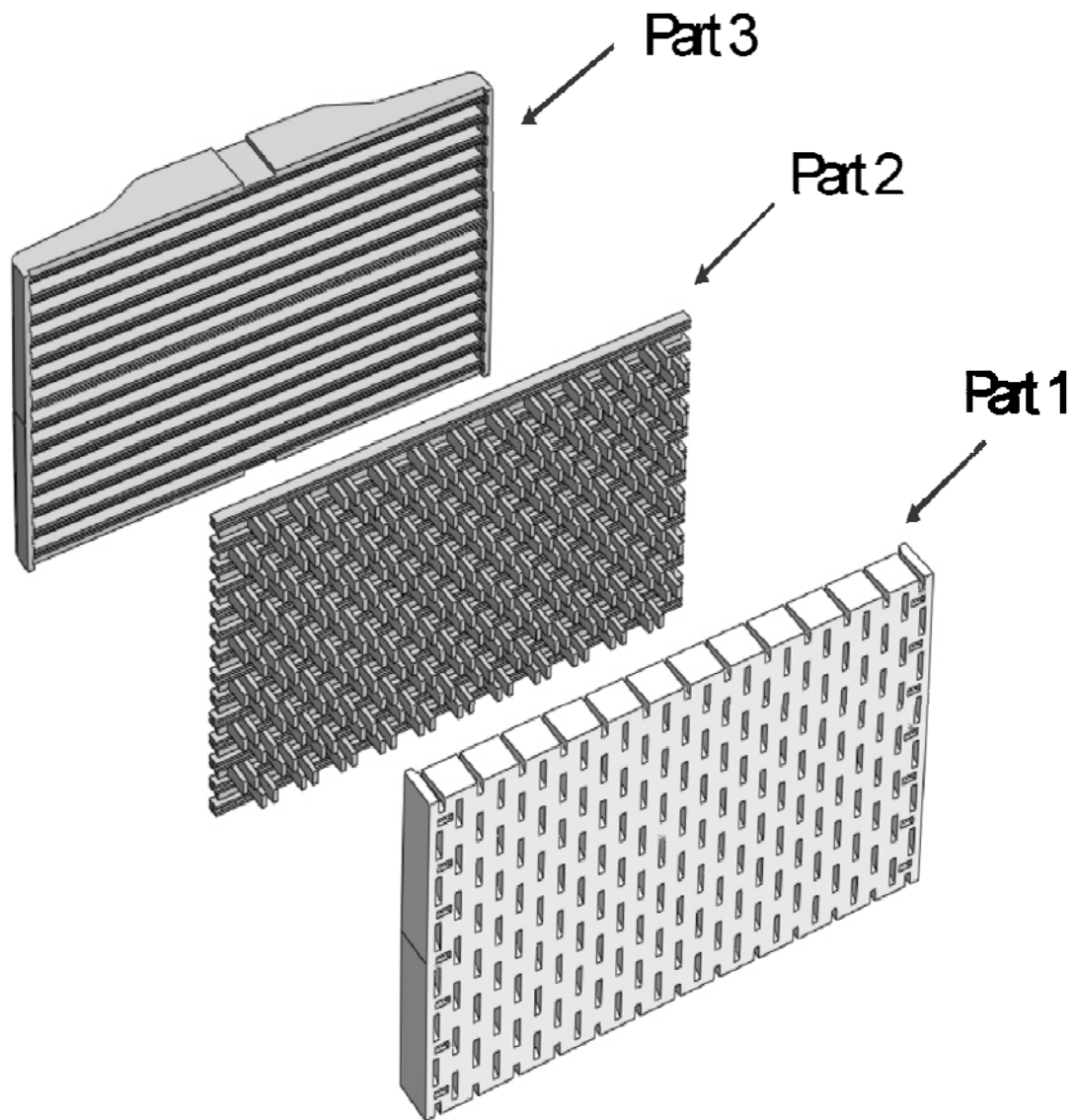


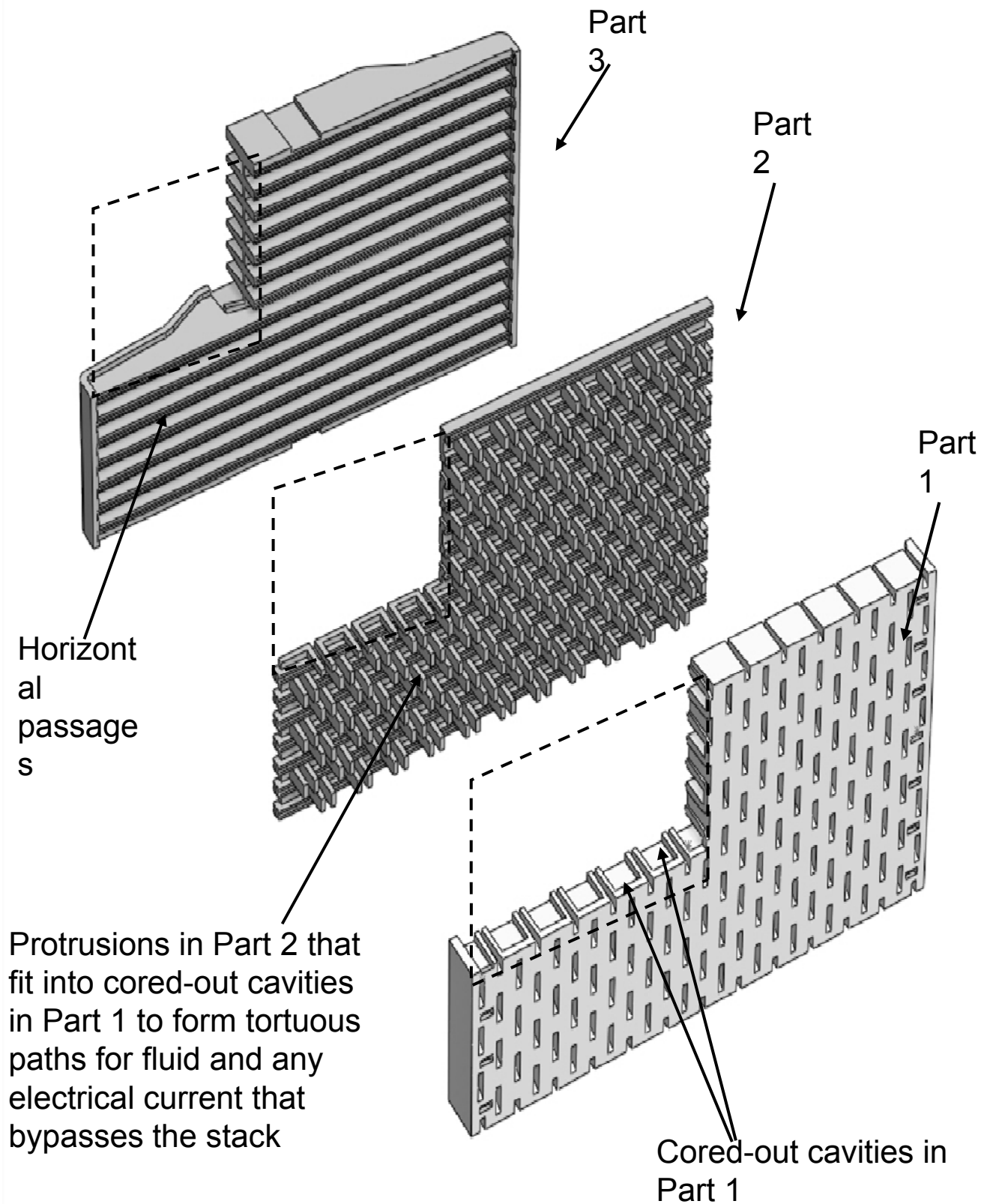
FIG. 12

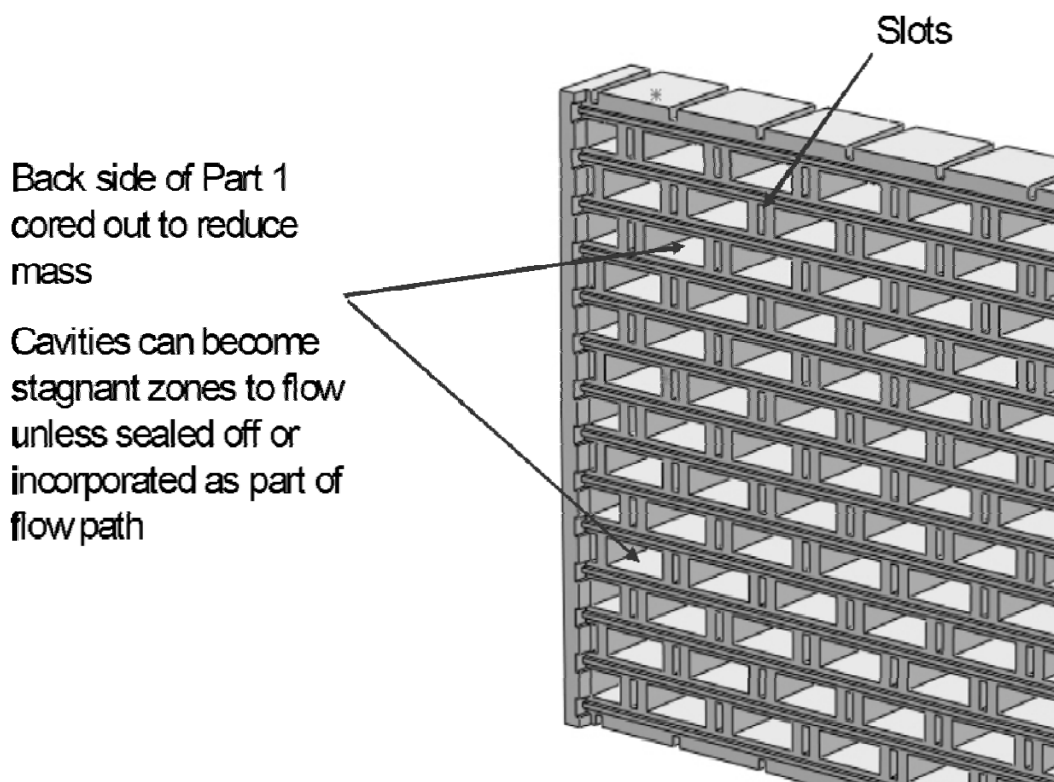
**FIG. 13**

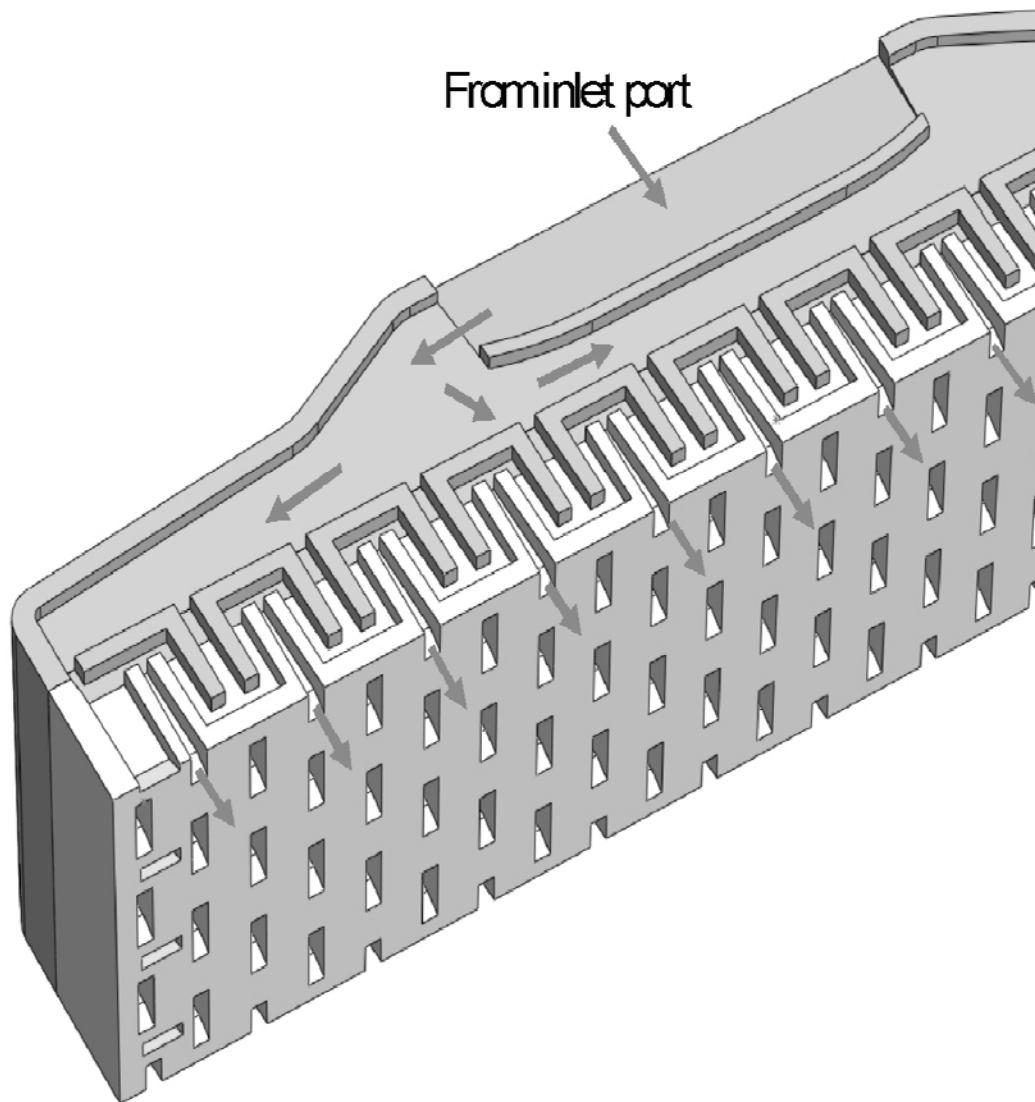
**FIG. 13A**

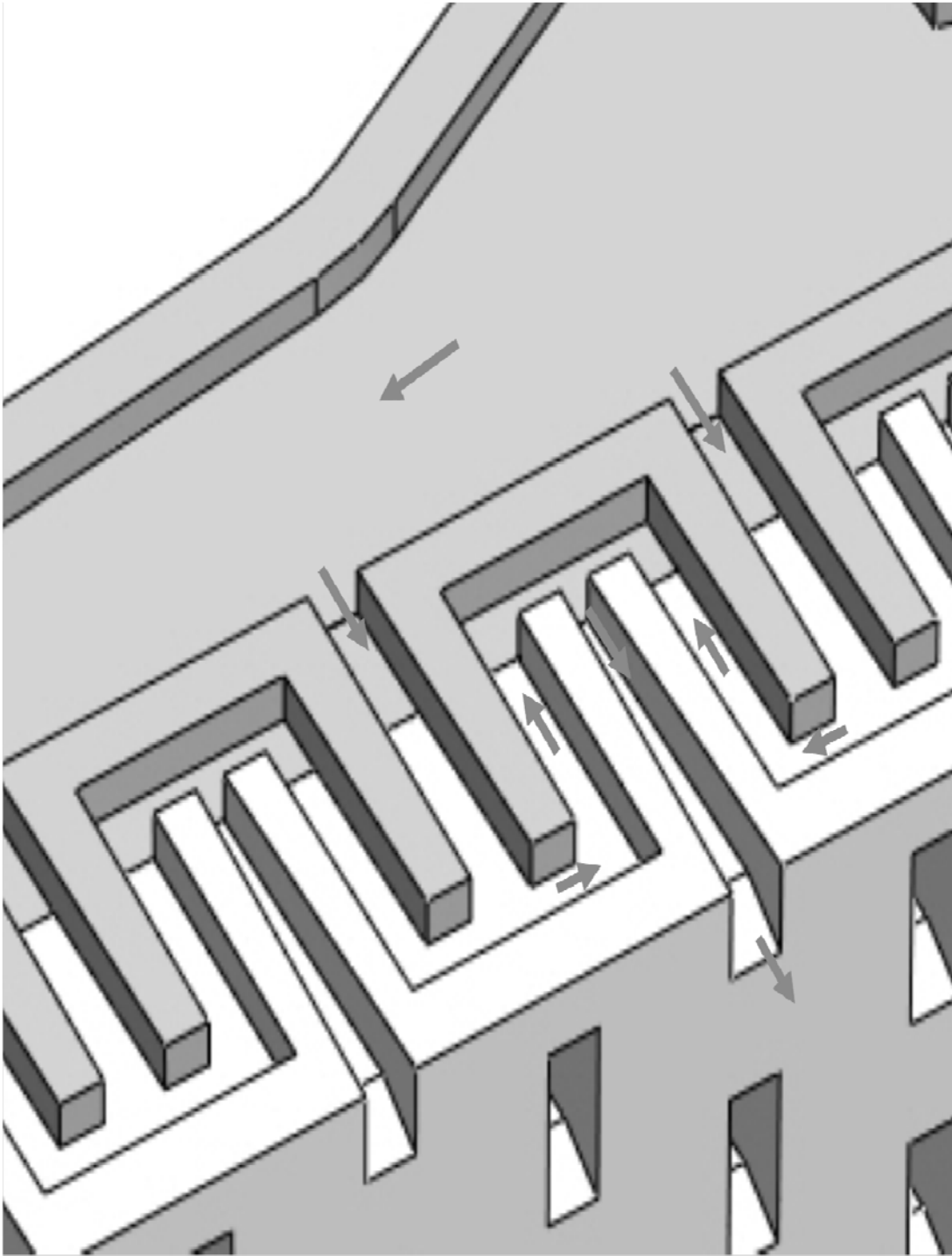
**FIG. 13B**

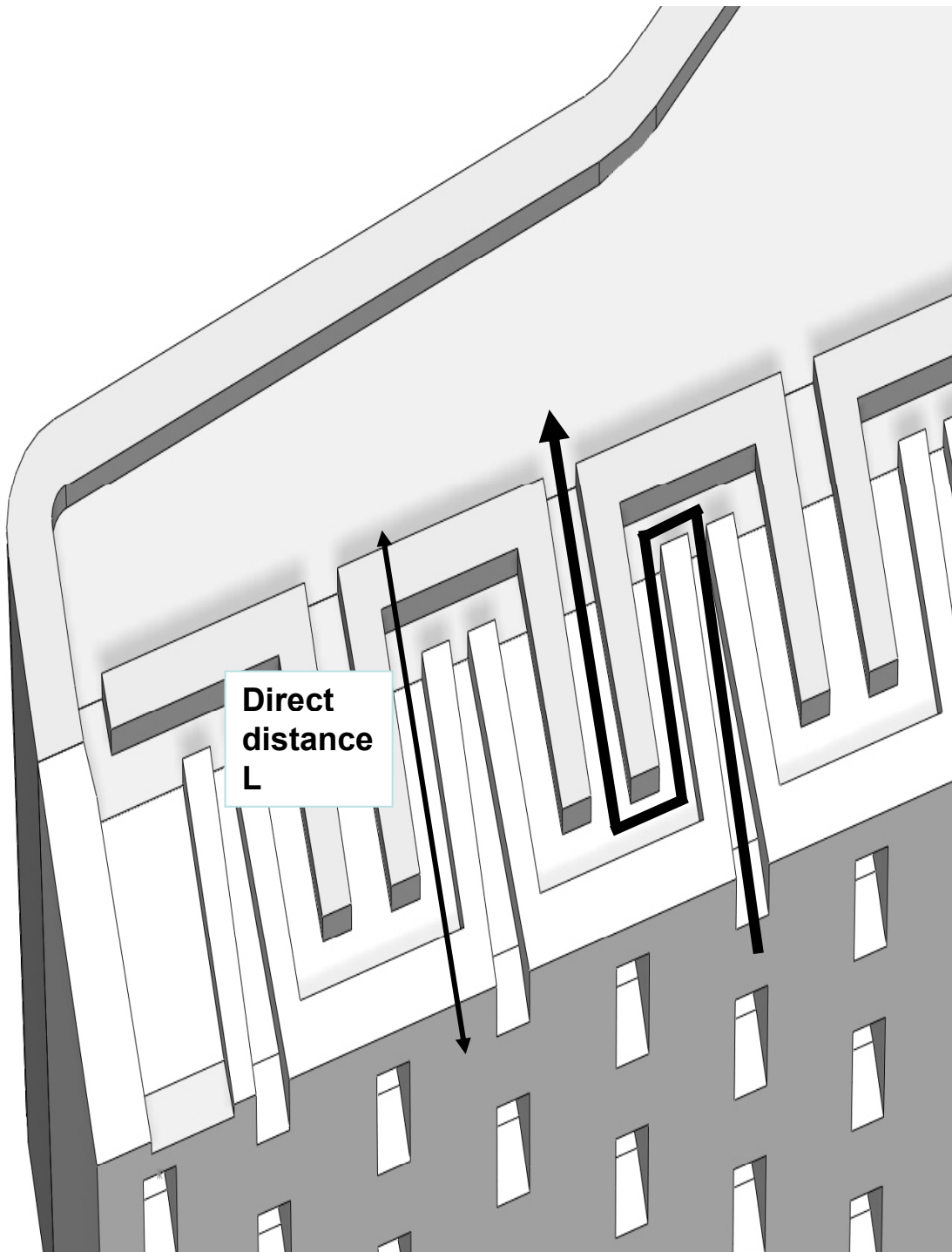
**FIG. 14**

**FIG. 14A**

**FIG. 15**

**FIG. 16**

**FIG. 17**



Tortuosity = Length of flow path /
direct distance (L)

FIG. 17A

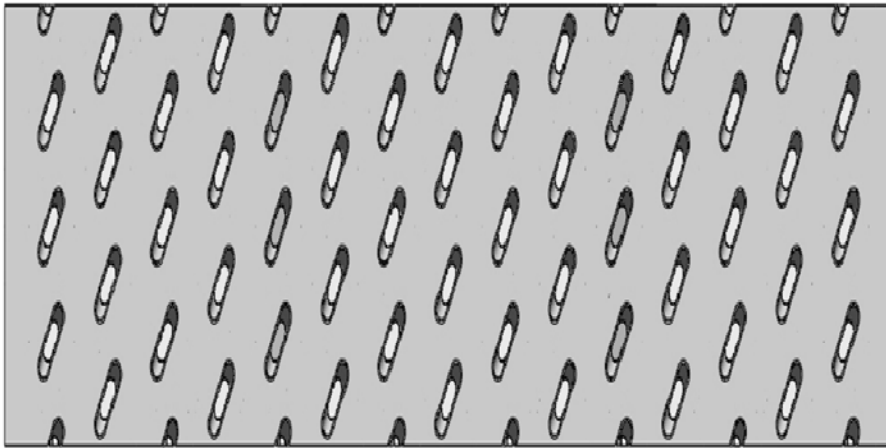
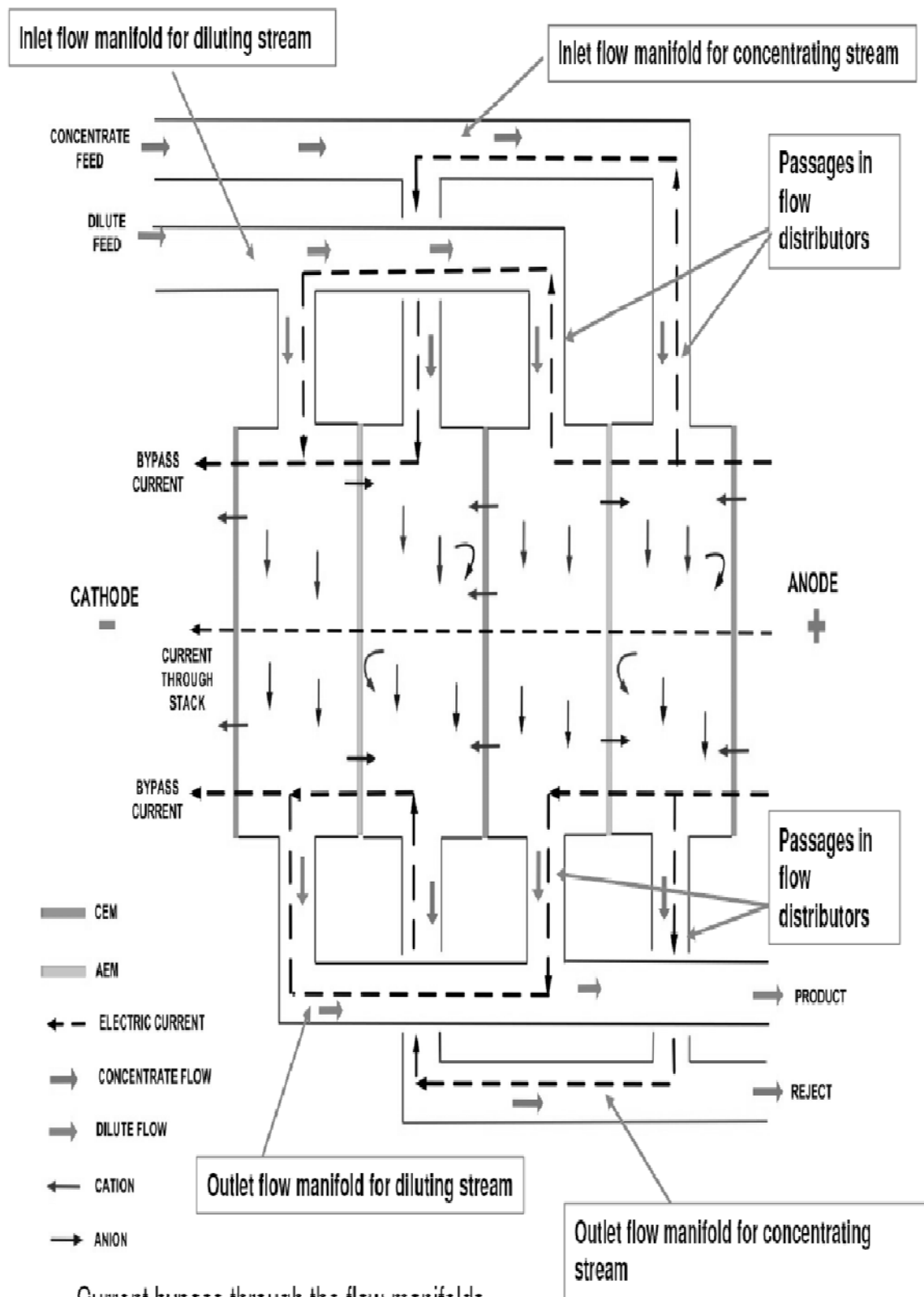
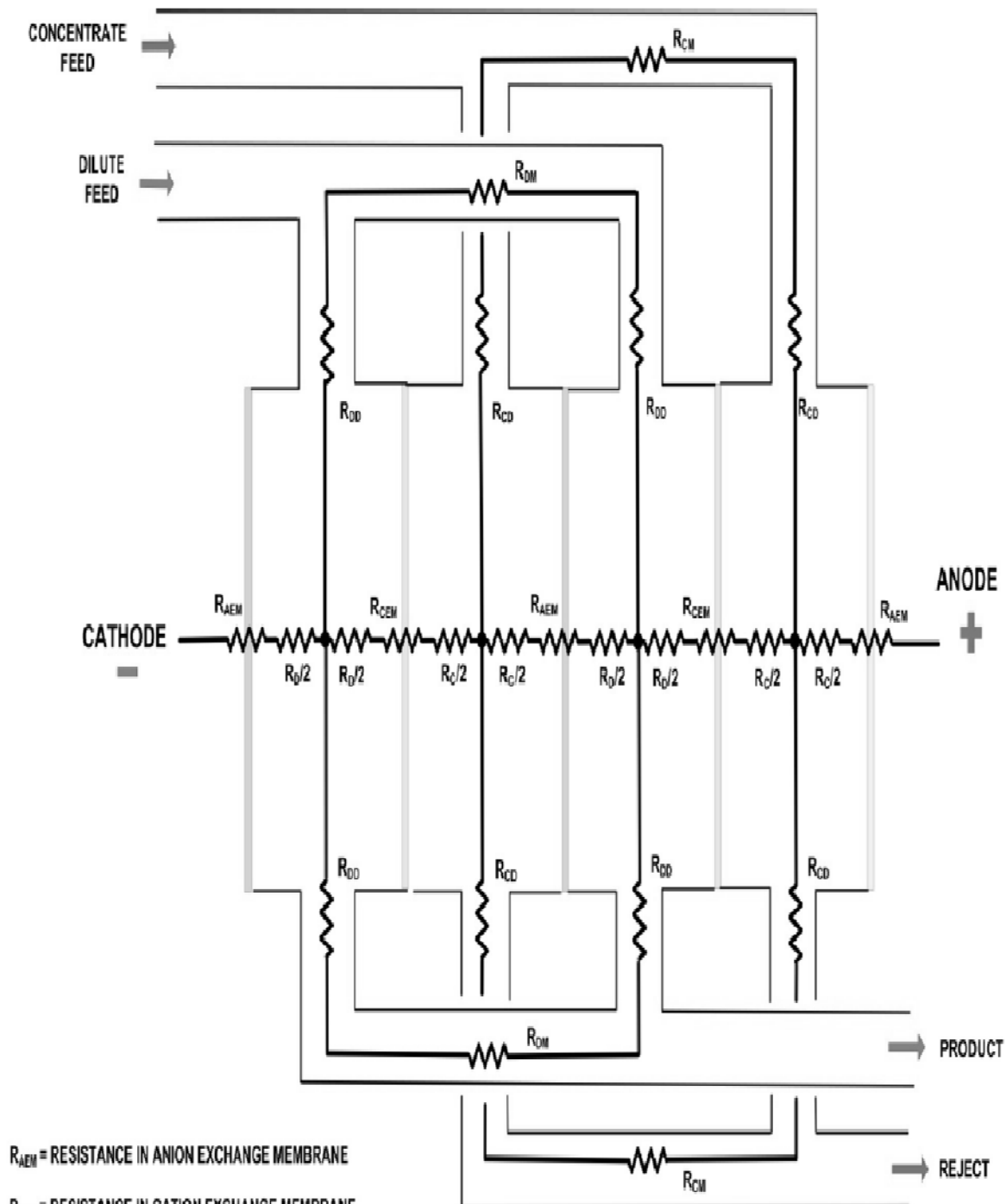


FIG. 18

**FIG. 19**



R_{AEM} = RESISTANCE IN ANION EXCHANGE MEMBRANE

R_{CEM} = RESISTANCE IN CATION EXCHANGE MEMBRANE

R_D = RESISTANCE IN DILUTING COMPARTMENT

R_C = RESISTANCE IN CONCENTRATING COMPARTMENT

R_{DD} = RESISTANCE IN FLOW DISTRIBUTOR FOR DILUTING COMPARTMENT

R_{CD} = RESISTANCE IN FLOW DISTRIBUTOR FOR CONCENTRATING COMPARTMENT

R_{DM} = RESISTANCE IN FLOW MANIFOLD FOR DILUTING COMPARTMENTS

R_{CM} = RESISTANCE IN FLOW MANIFOLD FOR CONCENTRATING COMPARTMENTS

Circuit diagram model of ED apparatus

FIG. 20