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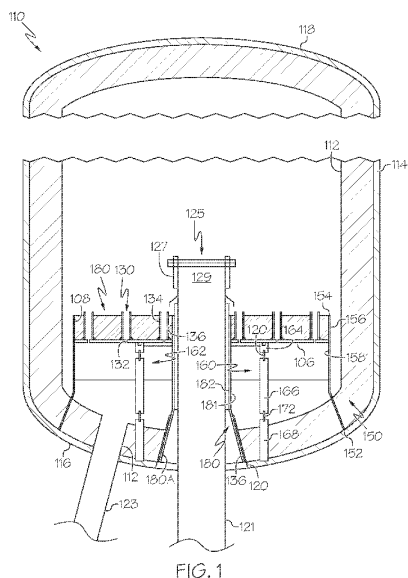
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(54) Title: PLATE GRID DISTRIBUTORS AND METHODS OF USING THE SAME



(57) Abstract: According to one or more embodiments, a plate grid distributor for distributing a fluid in a vessel may include a plate and an internal support system. The internal support system may include a plurality of pillar supports extending vertically from at or near a bottom surface of the plate towards a floor of the vessel. One or more of the pillar supports may include a flexible upper member connecting a rigid top support bracket to a rigid intermediate beam and a flexible lower member connecting the rigid intermediate beam to the rigid base support. According to one or more other embodiments, a method of distributing a fluid through a plate grid distributor in a vessel may include passing the fluid into the vessel below the plate grid distributor and directing the fluid through the plate grid distributor.

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