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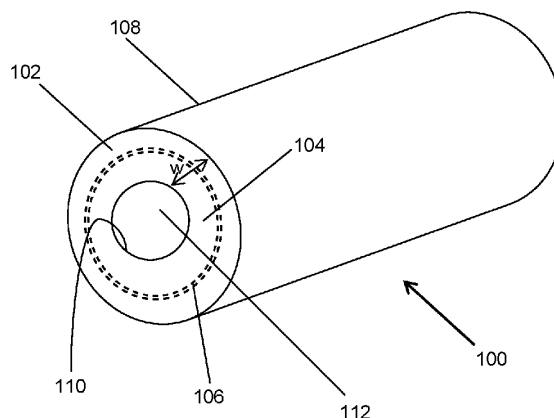
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(54) Title: A HOLLOW FIBER MEMBRANE

Figure 1



(57) Abstract: There is provided a hollow fiber membrane for vacuum membrane distillation having a maximum tensile strength of ≥ 3.5 MPa and a liquid entry pressure (LEP) of ≥ 3.0 bar, wherein the hollow fiber membrane is a single layer hollow fiber membrane comprising a wall with a thickness of ≤ 150 μ m and a cross-section comprising two open cell layers with an array of interconnected pores and a macrovoid layer between the two open cell layers. The open cell layers may be sponge-like porous layers. The hollow fiber membrane may comprise a hydrophobic polymer, in particular polyvinylidene fluoride (PVDF). The hollow fiber membrane is fabricated via a dry-jet wet spinning technique with bore fluid temperature of 25-65 $^{\circ}$ C and external coagulation bath temperature of 25-55 $^{\circ}$ C. The hollow fiber has improved mechanical strength and vacuum membrane distillation flux.

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