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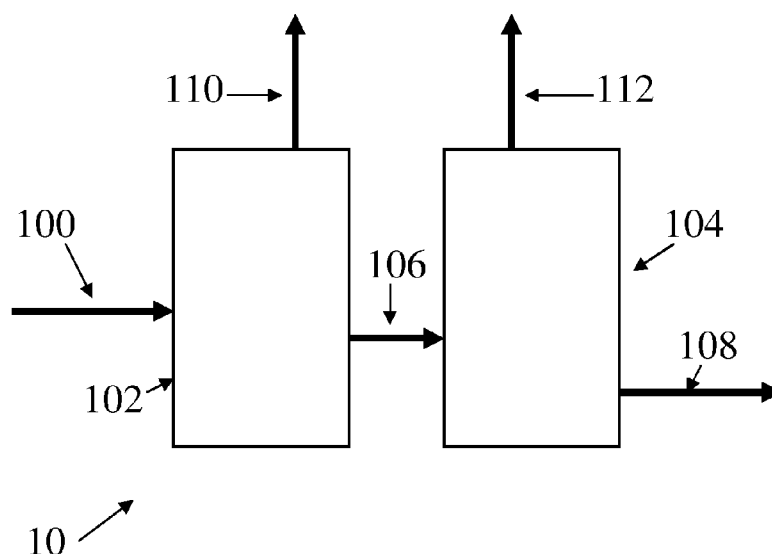


FIG. 1

(57) Abstract: Systems and methods for treating a stream comprising a hydrocarbon liquid and an aqueous-based liquid are provided. The systems and methods may utilize a media composite comprising a mixture of a cellulose-based material and a polymer. In certain systems and methods, the media composite is capable of being backwashed. The stream comprising the hydrocarbon liquid and aqueous-based liquid may be separated by contacting the stream with the media composite. In certain system and methods, the stream comprising the hydrocarbon liquid and aqueous-based liquid may be coalesced by contacting the stream with the media composite.