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(54) Title: VAPOR/VAPOR-SOLID INTERFACIAL GROWTH OF COVALENT ORGANIC FRAMEWORK MEMBRANES ON ALUMINA HOLLOW FIBER FOR ADVANCED MOLECULAR SEPARATION

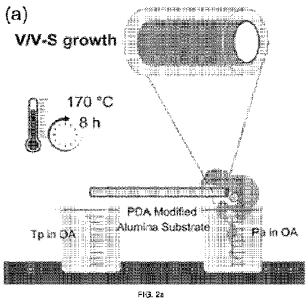

FIG. 2a

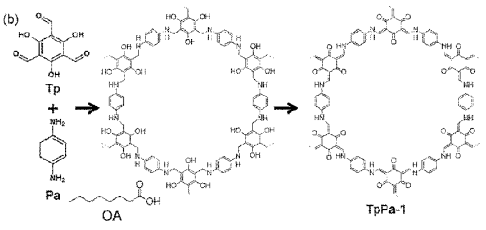

FIG. 2b

(57) Abstract: Disclosed herein are a membrane suitable for separation of chemical species, the membrane comprising a ceramic substrate having a first surface and a second surface, an anchoring chemical layer on the first surface of the ceramic substrate, and a covalent organic framework (COF) layer on the anchoring chemical layer, and a method of using the membrane in a process of separating a first organic compound from a second organic compound. Also disclosed herein are a method of forming a membrane suitable for separation of chemical species, and a device to manufacture a membrane suitable for separation of chemical species.

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