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(54) Title: FLAT SHEET MEMBRANE FOR CARBON DIOXIDE SEPARATION AND PREPARATION METHOD THEREOF

(57) Abstract: A flat sheet membrane for carbon dioxide separation comprises a thermoplastic polymer support layer coated with a carbon dioxide-selective layer, which is a block copolymer prepared by dissolving the block copolymer in a mixture of ethanol and water, and mixing until the solution becomes homogeneous. The obtained solution is then used to coat onto the support layer and dried before crosslinking. The membrane is then washed with water, immersed in water, and dried. The resulting flat sheet membrane for carbon dioxide separation is suitable for removing carbon dioxide from natural gas in conditions with high carbon dioxide content and demonstrates resistance to water vapor and heavy hydrocarbons, i.e., benzene and toluene.

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