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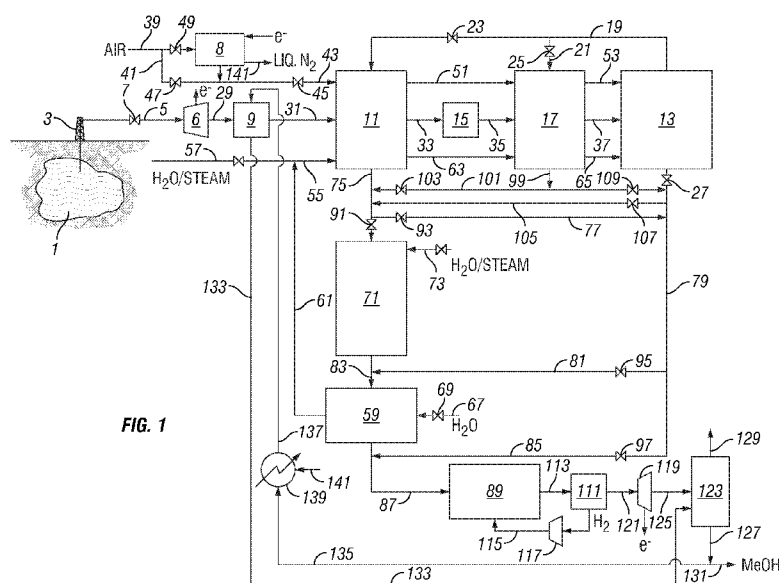
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(54) Title: METHOD FOR RECOVERING A NATURAL GAS CONTAMINATED WITH HIGH LEVELS OF CO₂



(57) Abstract: The present invention provides a method for recovering a natural gas contaminated with high levels of carbon dioxide. A gas containing methane and carbon dioxide is extracted from a reservoir containing natural gas, where carbon dioxide comprises greater than 40 vol.% of the extracted gas. The extracted gas is scrubbed with a wash effective to produce a washed extracted gas containing less carbon dioxide than the extracted gas and at least 20 vol.% carbon dioxide. The washed extracted gas is oxidized with an oxygen containing gas in the presence of a partial oxidation catalyst to produce an oxidation product gas containing hydrogen, carbon monoxide, and carbon dioxide. The oxidation product gas is then utilized to produce a liquid methanol product.



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