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(54) Title: MEMBRANE PRECONCENTRATION OF CARBON DIOXIDE FROM EXHAUST GAS SOURCES

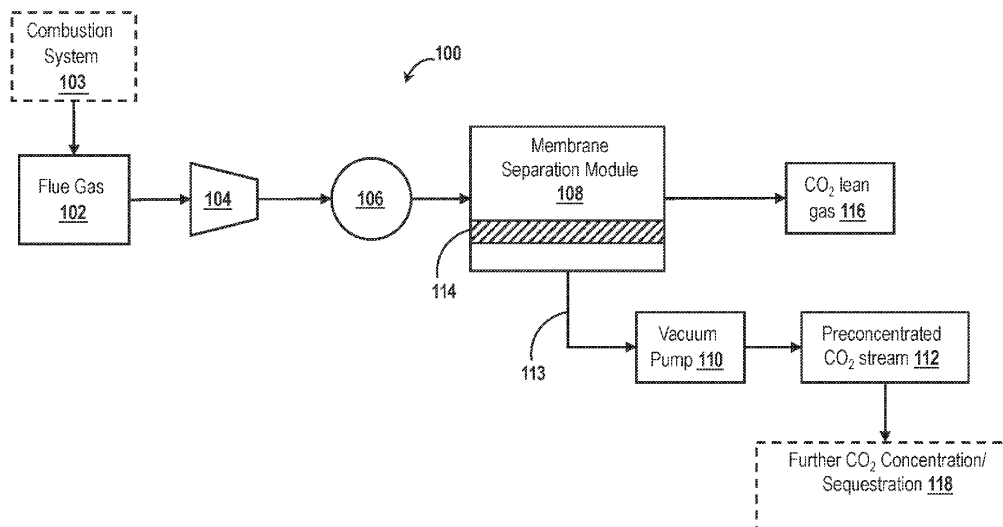


FIG. 2

(57) Abstract: A process of preconcentrating CO₂ in an exhaust gas stream includes flowing all the exhaust gas stream from an exhaust gas source to a CO₂ preconcentration system. Within the CO₂ preconcentration system, at least a portion of the exhaust gas stream is fed to a membrane separation module comprising a polymeric membrane that has a perm-selectivity for CO₂ over N₂ and O₂, to produce a CO₂ rich exhaust gas. The exhaust gas stream may initially have as low as 400 ppm CO₂ and may be preconcentrated to over 8 vol. % CO₂, thereby generating a more optimal feed for further treatment processes.

[Continued on next page]

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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