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(54) Title: STEAM-HYDROCARBON REFORMING WITH REDUCED CARBON DIOXIDE EMISSIONS

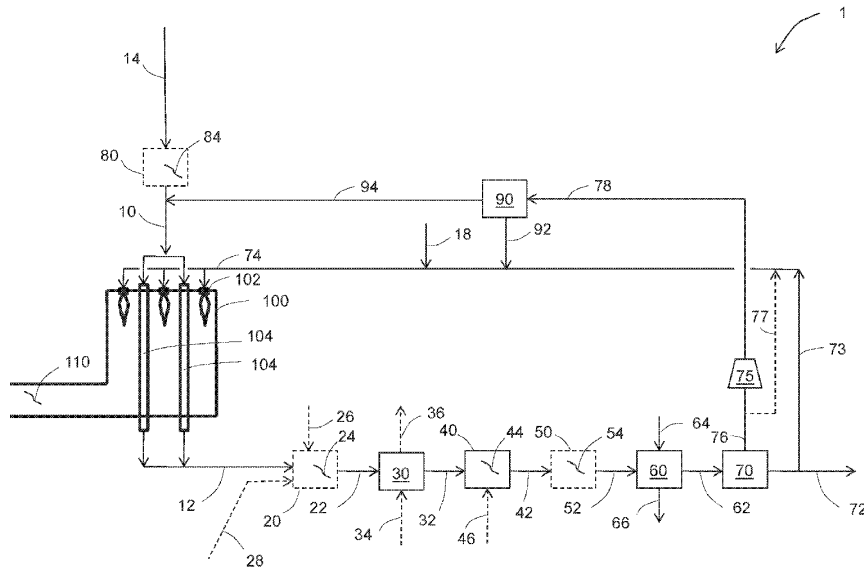


FIG. 1

(57) Abstract: A low carbon-emission hydrogen production process may be achieved by first separating carbon dioxide from a reformer syngas stream, followed by purifying the carbon dioxide-depleted syngas stream to produce a hydrogen product and a hydrogen-depleted tail gas stream. The hydrogen-depleted tail gas stream is then separated using a semi-permeable membrane after which the hydrogen-enriched permeate is used as fuel in the reformer burners and the hydrogen-depleted retentate is recycled to the feed.

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