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(54) Title: GAS-LIQUID CYCLONIC SEPARATORS AND METHODS TO REDUCE GAS CARRY-UNDER

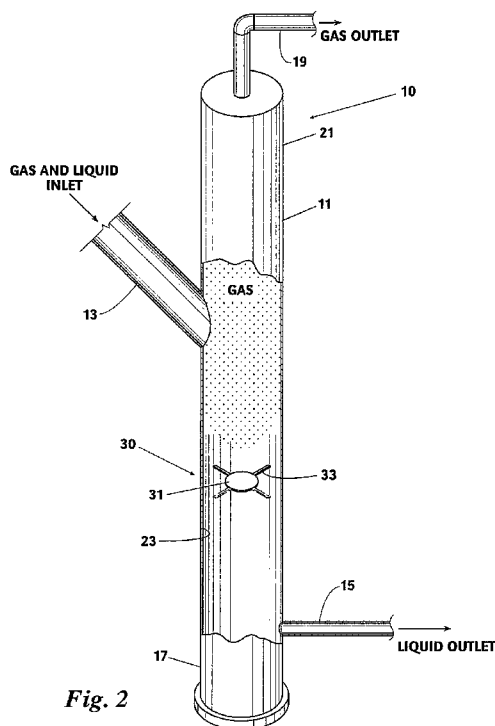


Fig. 2

(57) Abstract: A system and process for an improvement to a gas-liquid cylindrical cyclone ("GLCC") separator (10) to reduce gas carry-under to the liquid outlet (15) of the separator (10) is described. The means for reducing gas carry-under is arranged within the interior space of the separator and below the inclined inlet (13) of the separator (10) to affect the tangential flow of the incoming liquid-and-gas mixture stream into the interior space. The reducing means may be a vortex locator (30), preferably in the form of a horizontal plate (31), arranged coaxial with the separator vessel (11) and located at a vortex formation point within the interior space. The reducing means may also be a plurality of vertical baffles (41) located at a lower end (17) of the separator vessel (11) and extending radially inward from the wall (23) of the vessel (11). The reducing means may also be a combination of the horizontal plate (31) and vertical baffles (41).