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(54) Title: PRESSURE DIFFERENTIAL CONTROL IN AN ELECTROLYTIC CELL

(57) Abstract: An improved process for providing hydrogen from an electrolytic cell having an anolyte solution having an anolyte liquid level; a catholyte solution having a catholyte liquid level; generating oxygen at an oxygen pressure above the anolyte level; generating hydrogen at a hydrogen pressure above the catholyte level; the improvement comprising detecting at least one of the anolyte and the catholyte liquid levels as anolyte level and catholyte level data; feeding the level data to central processing means; determining the pressure differential between the levels from the level data, and pressure adjustment data by the central processing means; and providing the adjustment data to pressure control means to maintain the pressure differential within a selected range. The process offers a low cost method of controlling the pressure differential to within 2 cm WC of a set point.