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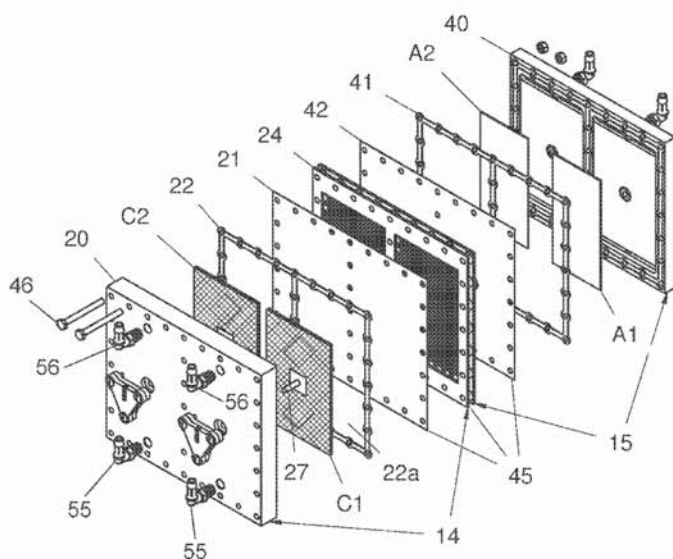


FIG. 3

(57) Abstract: An electrolyzing system is provided for producing higher quantities of electrolyzed waters within prescribed pH ranges for optimum usage and which can be operated for producing greater quantities of alkaline electrolyzed water than acidic electrolyzed water consistent with a users requirements. The system includes an electrolytic cartridge having cathode and anode cells each comprising a pair of electrodes disposed in laterally spaced coplanar relation to each other, with a respective ion permeable membrane in spaced relation to the pairs of electrodes. The cells are separated with a common separator plate that maintains the ion permeable membranes in parallel relation with the respective electrodes and which facilitates the communication of brine solution from a brine bath to both cells. The cells further can be operate with staggered input currents and the redirection of electrolyzed water between the cells for optimum control of pH levels of the resulting products.