



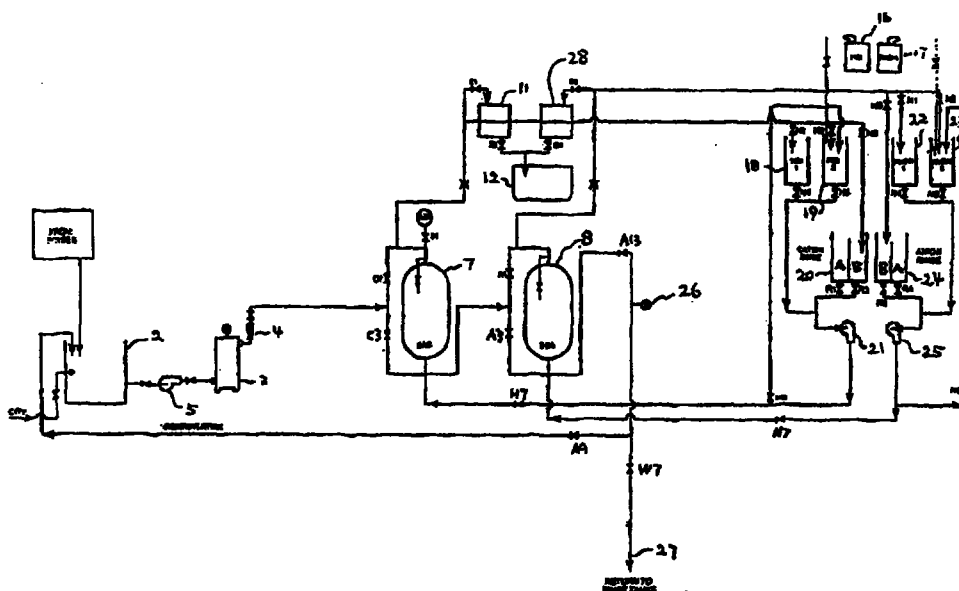
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(54) Title: METHOD AND APPARATUS FOR MINIMIZING WASTEWATER DISCHARGE



(57) Abstract

A method for minimizing wastewater discharge generated in an ion exchange regeneration system having a cation exchange bed (7) and an anion exchange bed (8), which method is characterized in that all of the segments of regenerant and displacement rinse are recirculated in a common loop, and shifted forward by one position, whereby the first segment is discarded in the subsequent cycle, and the last segment in the subsequent cycle is provided by fresh rinse, while chemicals are added as necessary, and in final rinse cycle, rinse flows through the cation exchange bed (7) and the anion exchange bed (8) in series, and recirculates in a loop, thereby eliminating over 90 % of waste.