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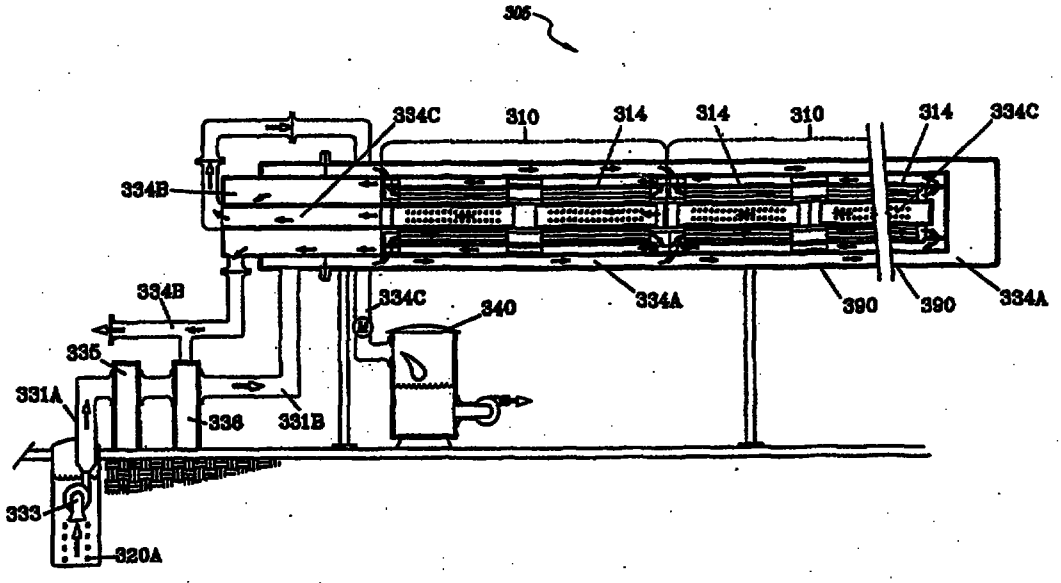

(57) Abstract

A filtration system includes production modules (305) which are mechanically coupled in series, and which contain filters that are fluidly coupled in parallel. Among the many different possibilities contemplated, each production module may advantageously contain not only a filter (314), but also flowpaths for feed fluid (334a), waste fluid (334b), and product fluid (334c) so that a series of coupled modules can be installed, accessed, and removed as single unit. It is further contemplated that coupled modules may be deployed in space efficient manner, such as by insertion into a deep or shall well, a tower, along the ground, into the side of a hill or mountain, or even under a road or parking lot. It is still further contemplated that adjacent production modules may be designed to mate with one another using a slip fit joint, and that the production modules may be maintained in mating relationship through connections to supporting cables or rods.