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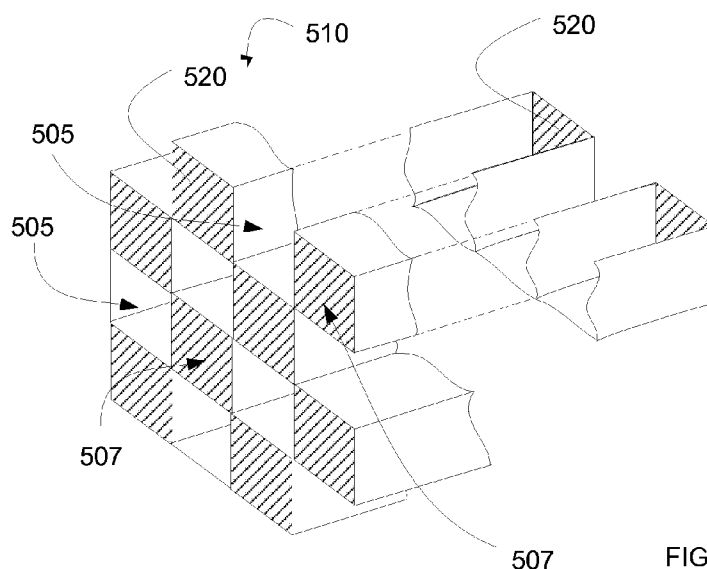


FIG. 5

(57) Abstract: Systems and methods for treating a fluid with a body are disclosed. Various aspects involve treating a fluid with a porous body. In select embodiments, a body comprises ash particles, and the ash particles used to form the body may be selected based on their providing one or more desired properties for a given treatment. Various bodies provide for the reaction and/or removal of a substance in a fluid, often using a porous body comprised of ash particles. Computer-operable methods for matching a source material to an application are disclosed. Certain aspects feature a porous body comprised of ash particles, the ash particles have a particle size distribution and interparticle connectivity that creates a plurality of pores having a pore size distribution and pore connectivity, and the pore size distribution and pore connectivity are such that a first fluid may substantially penetrate the pores.

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