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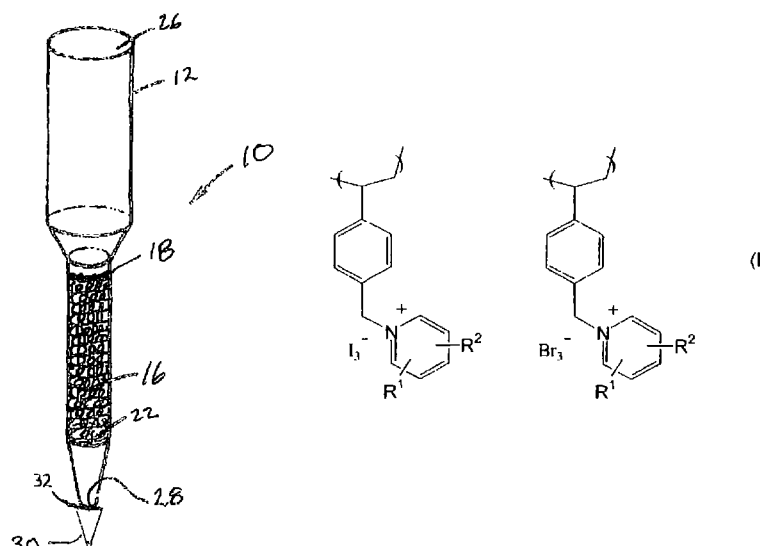
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(54) Title: ANTI-MICROBIAL AND OXIDATIVE CO-POLYMER



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(57) Abstract: A water-insoluble polymeric oxidizing medium is contemplated that has a plurality of polymerized N-pyridinium vinylbenzyl triiodide or tribromide moieties whose pyridinium rings bear two substituents, R¹ and R², that are independently a hydrido or a C₁-C₄ alkyl group, and correspond in structure to the formula (I), a process for preparing aseptic water and an apparatus useful for carrying out that process, both of which utilize a contemplated polymeric oxidizing medium are disclosed, as are processes for oxidizing trivalent arsenic or antimony to pentavalent arsenic or antimony and for removing arsenic from water. Alumina particles containing meta-periodate, iron or manganese are also disclosed that can be used to sorb pentavalent arsenic and antimony, as well as cobalt and mercury.

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