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**Worley et al.**(10) **Patent No.:** **US 7,687,072 B2**  
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**A61K 9/14** (2006.01)(52) **U.S. Cl.** ..... **424/489**; 424/400; 514/772.1(58) **Field of Classification Search** ..... None  
See application file for complete search history.(56) **References Cited**

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(57) **ABSTRACT**

Methylated polystyrene having pendant N-halamine and N-halamine precursor groups. Biocidal particles have been prepared by reacting highly crosslinked methylated polystyrene beads as starting materials with various N-halamine precursor compounds. The resulting polymer beads are halogenated with chlorine or bromine. The porous beads will be useful in disinfection applications, as well as for sanitization and controlling noxious odor when mixed with absorbent materials in items such as disposable diapers, infant swimwear, incontinence pads, bandages, sanitary napkins, pantliners, mattress covers, shoe inserts, sponges, animal litter, carpets, and fabrics.

**21 Claims, No Drawings**