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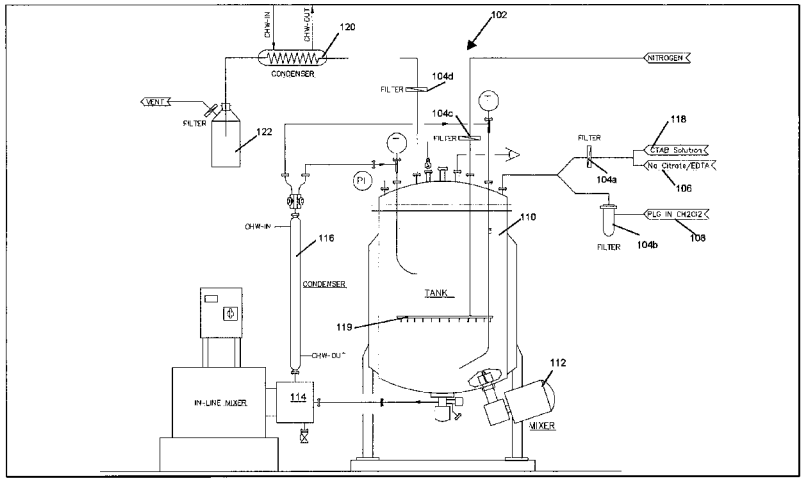
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(54) Title: MICROPARTICLE COMPOSITIONS AND METHODS FOR THE MANUFACTURE THEREOF



(57) Abstract: Microparticles with adsorbed complexes of macromolecule and detergent, methods of making such microparticles, and uses thereof, are disclosed. The microparticles comprise a polymer, such as a poly(α-hydroxy acid), a polyhydroxy butyric acid, a polycaprolactone, a polyorthoester, a polyanhydride, and the like, and are formed using cationic, anionic, or nonionic detergents. The surfaces of the microparticles have absorbed thereon a complex of biologically active macromolecules, such as nucleic acids, polypeptides, antigens, and adjuvants, and a detergent. Preferred polymers are poly(D,L-lactide-co-glycolides), more preferably those having a lactide/glycolide molar ratio ranging from 40:60 to 60:40 and having a molecular weight ranging from 30,000 Daltons to 70,000 Daltons. Preferred macromolecules are bacterial and viral antigens (such as HIV antigens, meningitis B antigens, streptococcus B antigens, and Influenza A hemagglutinin antigens) as well as polynucleotides that encode for such antigens.

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