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(54) **Title:** METHODS OF INACTIVATION OF VIRUSES USING *N*-METHYLGLUCAMIDE AND ITS DERIVATIVES

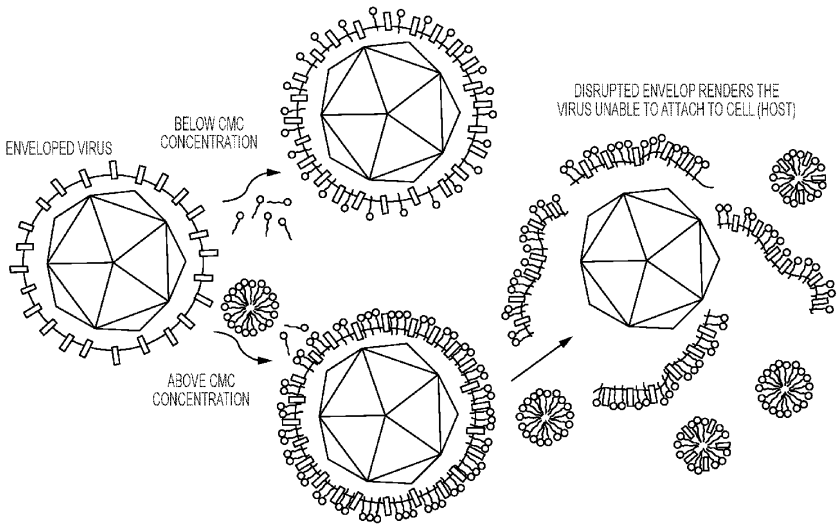


FIG. 1

(57) **Abstract:** This disclosure relates to methods for use in inactivating viruses. The methods of inactivating viruses with N-methylglucamides is applicable to the purification process of biologically-active drugs such as protein subunits, proteins (enzymes, factors, etc.), recombinant proteins, antibodies, vaccine or gene therapeutic products. The detergents used in this method are based on multiple N-methylglucamide homologs, consisting of a hydrophilic glucose moiety and hydrophobic fatty acid tail, linked by an amide bond. Additionally, these sugar-based detergents are nonionic by nature, which do not disrupt the drug protein, plasma biologies, non-enveloped viral vaccine or adeno associated viral particles. A method of purifying a biological product solution of interest having an unidentified enveloped virus contaminant, including incubating a biological product solution of interest with a standard solution, inactivating any potential enveloped virus contaminant present in the biological product solution of step (a), measuring the inactivated virus present in

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the final solution of step (b), incubating a separate biological product solution of interest with a N-methylglucamide solution, measuring the inactivated virus present in the final solution of step (d), and comparing the results of the final solutions of step (c) and step (e).