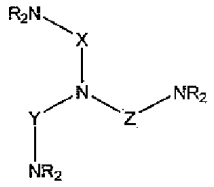
within about 0.5 pH units of the isoelectric point of the most alkaline glycoform of the IgG antibody in the preparation; or (2) when the salt is present at concentration greater than about 50 mM, a pH value of the preparation is in a range from about 3 to about 9; and wherein the final operating condition of the contacting step is defined by either an absence of excess salt in the preparation or a non-zero salt concentration in the preparation of not greater than 20 mM, and a pH value in a range from about 5 to within about 0.5 pH units of the isoelectric point of the most alkaline glycoform of the IgG antibody. Also disclosed herein are methods of purifying an IgG antibody from a preparation containing the antibody and contaminants, preferably where the preparation has been processed to remove at least 95% of the chromatin present in the original production medium from which it is derived. The method includes a step of contacting the preparation with an electropositive membrane having a porosity that retains at least 50% of non-adsorbed solutes with a hydrodynamic diameter greater than a selected size but permits passage of non-adsorbed solutes with a hydrodynamic diameter less than the selected size and the selected size may be any amount between about 10 nm and about 15 nm. During at least a portion of the contacting step the preparation comprises a salt such that (1) when the salt is present at a concentration less than about 50 mM, a pH value of the preparation is in a range from about 3 to within about 0.5
pH units of the isoelectric point of the most alkaline glycoform of the IgG antibody in the preparation; or (2) when the salt is present at concentration greater than about 50 mM, a pH value of the preparation is in a range from about 3 to about 9. The final operating condition of the contacting step is defined by either an absence of excess salt in the preparation or a non-zero salt concentration in the preparation of not greater than 20 mM, and a pH value in a range from about 5 to within about 0.5 pH units of the isoelectric point of the most alkaline glycoform of the IgG antibody.

[0008] In certain examples, the preparation is provided for the method in a form having a reduced level of chromatin such that the amount of chromatin in the preparation is less than about 5% of the amount of chromatin which had been present in the source sample from which the preparation was obtained. In certain examples, the source sample is a cell culture harvest, tissue sample, or bodily fluid having a substantial amount of chromatin present and the source sample is subjected to one or more processes for clarification, purification or

nitrogen-containing moieties each have a formula of formula I:



wherein each incidence of R is independently hydrogen or C_1-C_{10} alkyl or C_1-C_{10} alkyl substituted with hydroxyl, amino, or halo moieties, with the proviso that at least one R is the site of attachment to the electropositive membrane, optionally via a linker; and

each of X, Y, and Z are independently $(CH_2)_n$, where n is an integer from 2 to 8, wherein a CH_2 group is optionally replaced by O, or NH.

28. The method of claim 27 wherein each incidence of R is independently hydrogen or C_3-C_8 alkyl, with the proviso that at least one R is the site of attachment to the electropositive membrane, optionally via a linker.

29. The method of claims 27-28 wherein each n is an integer from 2 to 6.

30. The method of claims 23-29 wherein the positively charged nitrogen-containing tris(2-aminoethyl)amine.

31. The method of claims 23-30, wherein the positively charged nitrogen-containing moieties are presented in a grafted dendrimeric form prepared by immobilizing a bivalent or trivalent primary amino compound on the membrane surface, then activating the free amino groups and attaching another layer of bivalent or trivalent amino compounds, and optionally repeating the process.

32. The method of claims 23-25, wherein the positively charged nitrogen-containing moieties may include one or more hydrophobic moieties of alkyl or aryl composition.

33. The method of any one of claims 1 to 32, wherein the electropositive membrane is housed in a device to support tangential flow filtration.