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(54) Title: METHOD FOR REMOVING UNMODIFIED HEMOGLOBIN FROM CROSS-LINKED HEMOGLOBIN SOLUTIONS INCLUDING POLYMERIC HEMOGLOBIN WITH HIGH TEMPERATURES SHORT TIME HEAT TREATMENT APPARATUS

(57) Abstract: A method heat treatment of cross-linked hemoglobin solutions including polymeric hemoglobin is disclosed. The method involves contacting the hemoglobin solution with a high temperature short time heat treatment apparatus. The high temperature short time process thermally denatures unmodified tetrameric hemoglobin (hemoglobin dimer form), protein impurities (e.g. immunoglobulin-G, serum albumin), bacteria, and viruses so that renal injury, vascular detrimental effects and other toxicity reactions can be avoided.

