Title: NANOPOROUS ADSORBENT MATERIAL FOR REMOVING SPECIES FROM AN AQUEOUS SOLUTION

Abstract: The invention relates to a process for removing ionic species and/or species capable of forming hydrogen bridges from an aqueous mixture wherein at least part of the species are dissolved, in which process an absorbent material is used that comprises a polymeric network of monomers having two or more polymerizable groups, the monomers being arranged as a smectic liquid crystalline phase, wherein the polymerization of the monomers has locked the smectic liquid crystalline phase into a smectic liquid crystalline network.