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(54) Title: A METHOD FOR THE PREPARATION OF 1,2-PROPANEDIOL

(57) Abstract: In a method for preparing 1,2-propanediol by the steps of reacting propene with hydrogen peroxide in the presence of a phase transfer catalyst and a heteropolytungstate in a liquid two phase reaction mixture with an organic phase comprising an alkylaromatic hydrocarbon solvent, separating the reaction mixture into an aqueous phase comprising 1,2-propanediol and an organic phase, recycling the oxygen depleted organic phase (P_d) to the reaction step, and recovering 1,2-propanediol from the aqueous phase, the reaction and separation steps are carried out in liquid flooded vessels at a pressure high enough to suppress desorption of gas from the liquid reaction mixture and the separated organic phase is contacted with a stream of a non-flammable gas to desorb from 10 to 75 % of the oxygen dissolved in the organic phase into the stream of non- flammable gas before recycling the organic phase, which purges oxygen safely with little loss of propene.



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