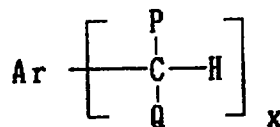


ABSTRACT OF THE DISCLOSURE

A method for producing aryl alkyl hydroperoxides
which comprises selectively oxidizing an aryl alkyl
hydrocarbon having the formula:



wherein P and Q are hydrogen or an alkyl and may be the same
or different from each other; x is an integer of 1-3; and
Ar is an aromatic hydrocarbon group having a valence of x,
with an oxygen-containing gas in the presence of a transition
metal complex which contains, as a ligand, a cyclic
polyfunctional amine compound having at least three nitrogen
atoms in the ring forming molecular chain or an open chain
polyfunctional amine compound having at least three nitrogen
atoms in the main chain of the molecule.