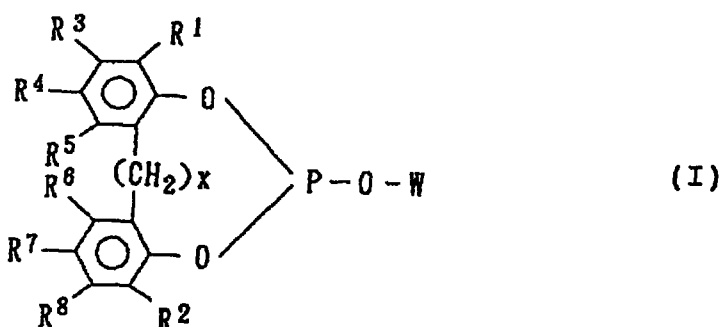


ABSTRACT OF THE DISCLOSURE

A method for dimerizing an olefin, which comprises
 dimerizing an olefin in the presence of a catalyst,
 wherein a nickel compound, an organic aluminum compound
 5 and a phosphite compound of the formula (I):



wherein each of R^1 and R^2 which may be the same or
 different, is a hydrocarbon group, each of R^3 to R^8 which
 15 may be the same or different, is a substituent containing
 no oxygen atom, or a hydrogen atom, W is a substituted or
 unsubstituted aromatic hydrocarbon group, and x is 0 or
 1, are used as the catalyst.