Polymerisation of cycloalkenes

The invention relates to a homogeneous two-component catalyst system consisting of (a) a salt of a transition metal selected from the Group VIb of the Periodic Table; and (b) an organosilicon compound having the formula:

R x Si(OR')y(OSiR3)z (Ia)

(R2SiO)3 ~~(Ib) or ~(R3Si)2NH ~~(Ic) wherein R is identical or different and represents a hydrogen atom, a C1-C4 alkyl or phenyl group; R' represents a C1-C4 alkyl or phenyl group; 0 < x <= 3; 0 <= y < 4; z=0 or 1; y+z <= 1; x+y+z=4; and wherein the molar ratio of component (b) to component (a) is at least about 0.5:1. Such a catalyst system is useful for the catalysis of cycloalkenes to saturated polycyclic oligomers.