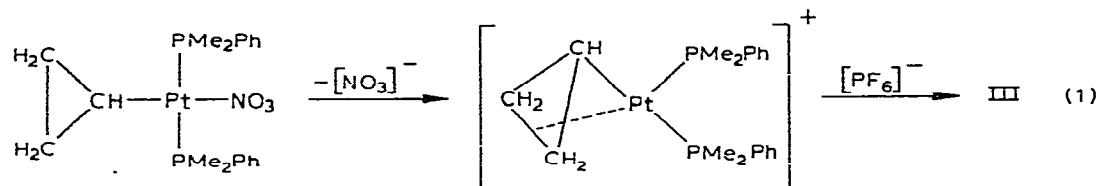
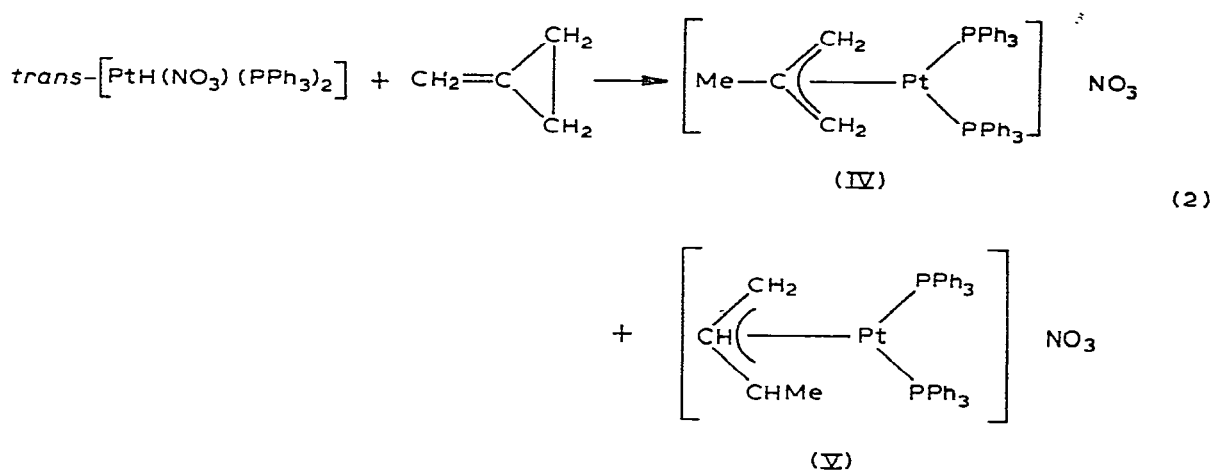


The reactions shown in Scheme 1 all occur readily at room temperature. Noteworthy is the observation that II is stable and can be crystallised without decomposition, but, on treatment with silver nitrate, ring opening to give the η -allylplatinum derivative, III [4], occurs very rapidly. We suggest that the ring-opening proceeds via a three coordinate platinum(II) species formed by dissociation of the weakly bound nitrate ligand as shown in eq. 1.



Reaction of *trans*-[PtH(NO₃)(PPh₃)₂] with methylenecyclopropane gives a mixture of η -allylplatinum products as shown in eq. 2.



Complex V is probably formed by addition of the Pt—H bond to the C=C bond of methylenecyclopropane to give *trans*-[Pt(NO₃)(CH₂CH(CH₂))(PPh₃)₂] followed by ring opening and rearrangement [2, 5]. Consistent with this theory is the observation that reaction of *trans*-[PtD(NO₃)(PEt₃)₂] with methylenecyclopropane gave very largely the η -1-methyl-2-deuterioallyl derivative, VI, probably formed according to eq. 3, L = PEt₃.

The 2-methylallyl derivative, IV is probably formed by initial addition to give *trans*-[Pt(NO₃)(C(CH₂)(Me)CH₂)(PPh₃)₂] followed by ring opening of the 1-methyl-

