

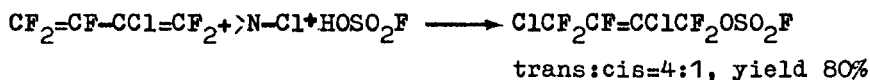
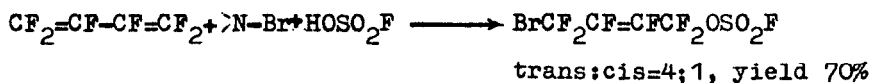
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## ELECTROPHILIC REACTIONS OF HIGH FLUORINATED DIENES

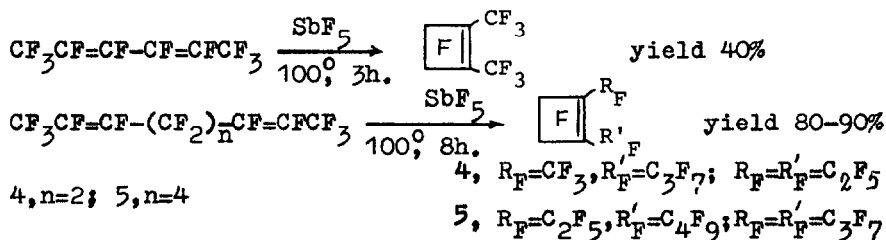
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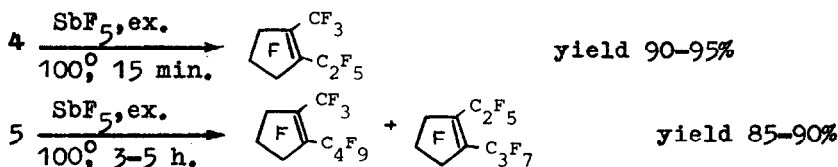
Conjugated addition of  $>\text{N-Hal}$  compounds to perfluorobutadiene (1) and 2-chlor-perfluorobutadiene (2) in solution of  $\text{HOSO}_2\text{F}$  has been studied. The reaction mixture contains only products of 1,4-addition and in the case of diene (2) electrophilic attack proceeds only at trifluorovinyl group:



In the presence of catalytic amounts of  $\text{SbF}_5$  internal perfluoro dienes 1,4-cyclization has been found:



The use of excess of  $\text{SbF}_5$  in the case of dienes (4) and (5) yields to the corresponding dialkylcyclopentens only:



The reaction pathways of perfluorodienes 1,4- and 1,5-cyclizations are discussed.