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REARRANGEMENT OF FLUORINATED  
METHYLENOCYCLOPROPANE

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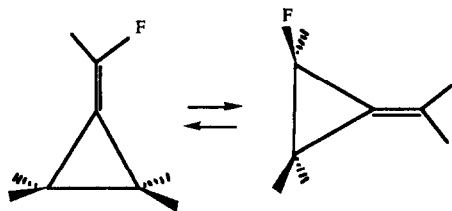
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We have recently reported on a novel, one-step mechanism for the degenerate thermal rearrangement of methylenecyclopropane [1]. This is an alternative to the two-step process previously reported.

By monosubstitution of the hydrocarbon we obtain two different modes of ring closure, *syn* or *anti* with respect to the substituent. Presently we have studied the reaction



On the basis of *ab initio* calculations on the level MP2(6-31G\*)//3-21G, it is concluded that in a reaction mechanism parallelling the hydrocarbon system, the ring closure is *anti* to the fluorine.

1 A. Skancke, L.J.Schaad and B.A.Hess, Jr., J. Am. Chem. Soc., **110** 5315 (1988).