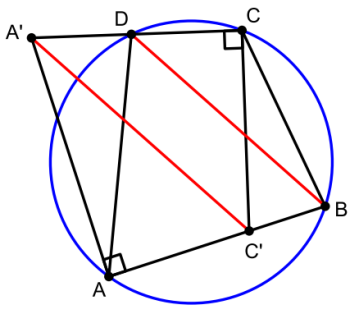

Example 1 87 : As shown in Figure 1, quadrilateral $ABCD$, $AA'\perp AB$ intersects CD at A', $CC'\perp CD$ intersects AB at C', prove: The necessary and sufficient condition for four points A, B, C and D to be cocircles is $A'C'//BD$.

$$\frac{A'-C'}{D-B}\frac{\dfrac{A-C}{A-B}}{\dfrac{D-C}{D-B}}\frac{\dfrac{A'-C}{A'-C'}}{\dfrac{A-C}{A-C'}}\frac{D-C}{A'-C}\frac{A-B}{A-C'}=1$$