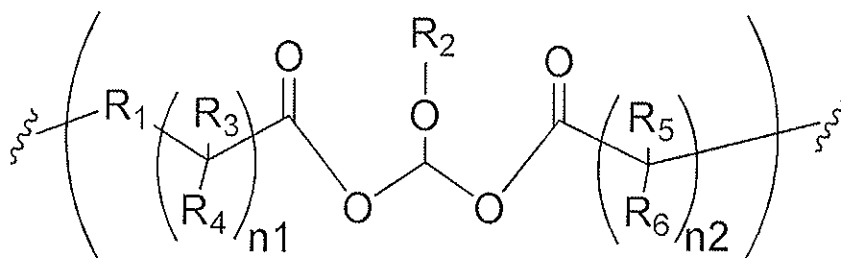


POLYMER, METHOD FOR PRODUCING THE SAME, AND RESIST  
COMPOSITION CONTAINING THE SAME

ABSTRACT

Provided is a copolymer containing a repeating unit represented by the following formula (1):

[Chemical Formula 1]



wherein  $R_1$  represents an alkanediyl group, a heteroalkanediyl group, a cycloalkanediyl group, a heterocycloalkanediyl group, an arylene group, a heteroarylene group, or an alkylarylene group;  $R_2$  represents a hydrogen atom, an alkyl group, a heteroalkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, an alkoxy group, or an alkylalkoxy group;  $R_3$ ,  $R_4$ ,  $R_5$  and  $R_6$  each independently represent a hydrogen atom or an alkyl group having 1 to 5 carbon atoms;  $n_1$  represents an integer from 0 to 10; and  $n_2$  represents an integer from 0 to 10.

The copolymer, when incorporated into a resist composition, can provide a satisfactory resist pattern with high sensitivity, high resolution, high etching resistance

and a reduced amount of outgas.

Figure 1