

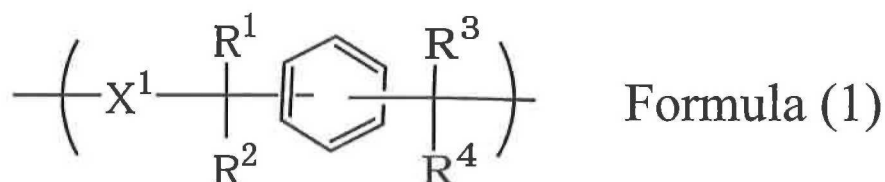
ABSTRACT

RESIST UNDERLAYER FILM-FORMING COMPOSITION CONTAINING
POLYMER HAVING ARYLENE GROUP

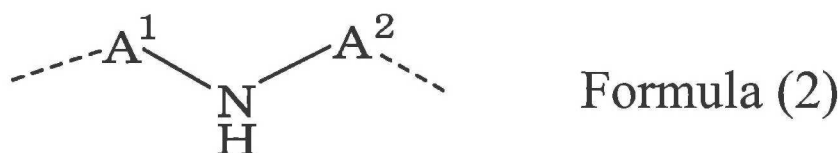
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There is provided resist underlayer film-forming composition for lithography process having characteristics of enabling wafer surface planarization after film formation, excellent planarization performance on substrate with level difference, and good embeddability in fine hole pattern.

10 Resist underlayer film-forming composition comprising polymer having unit structure of Formula (1) and solvent,



wherein each of R^1 to R^4 is independently hydrogen atom or methyl group, and X^1 is divalent organic group having at least one arylene group optionally substituted by alkyl group, amino group, or hydroxyl group, and wherein X^1 in Formula (1) is organic group of Formula (2),



wherein A^1 is phenylene group or naphthylene group, A^2 is phenylene group, naphthylene group, or organic group of Formula (3), and dotted line is bond, and



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wherein each of A^3 and A^4 is independently phenylene group or naphthylene group, and dotted line is bond.