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(19) **United States**(12) **Patent Application Publication****Honda et al.**(10) **Pub. No.: US 2019/0324367 A1**(43) **Pub. Date: Oct. 24, 2019**(54) **PHOTOACID GENERATOR, CHEMICALLY AMPLIFIED RESIST COMPOSITION, AND PATTERNING PROCESS**(71) Applicant: **Shin-Etsu Chemical Co., Ltd.**, Tokyo (JP)(72) Inventors: **Kazuya Honda**, Joetsu-shi (JP);
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Masaki Ohashi, Joetsu-shi (JP);
Kazuhiro Katayama, Joetsu-shi (JP)(73) Assignee: **Shin-Etsu Chemical Co., Ltd.**, Tokyo (JP)**Publication Classification**(51) **Int. Cl.**
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A photoacid generator having formula (1a) is provided. A chemically amplified resist composition comprising the PAG forms a pattern of rectangular profile with a good balance of sensitivity and LWR when processed by photolithography using ArF excimer laser, EB or EUV.

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