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(71) Applicant: **BREWER SCIENCE, INC.** [US/US]; 2401
Brewer Drive, Rolla, MO 65401 (US).

(72) Inventors: **LI, Si**; 1503 Huntleigh Dr, Rolla, MO 65401
(US). **LUO, Ming**; 14 Quailways Dr, Saint Louis, MO
63141 (US). **ZHANG, Ruimeng**; 71 Hawthorne Ave,
Holmdel, NJ 07733 (US). **BRAKENSIEK, Kelsey**; 1003
Turkey Run, Rolla, MO 65401 (US). **WANG, Xue**;
71 Hawthorne Ave, Holmdel, NJ 07733 (US). **LIANG,
Yichen**; 2712 Cedar Springs Pl, Round Rock, TX 78681
(US). **LU, Xinlin**; 104 Belotta Ct, Apt B, Rolla, MO 65401
(US). **LU, Pengtao**; 1512 Overland Dr, Rolla, MO 65401
(US).

(74) Agent: **BORNMAN, Tracy, L.**; Hovey Williams LLP,
10801 Mastin Blvd, Suite 1000, 84 Corporate Woods, Over-
land Park, KS 66210 (US).

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(54) Title: UNDERLAYER AND METHODS FOR EUV LITHOGRAPHY

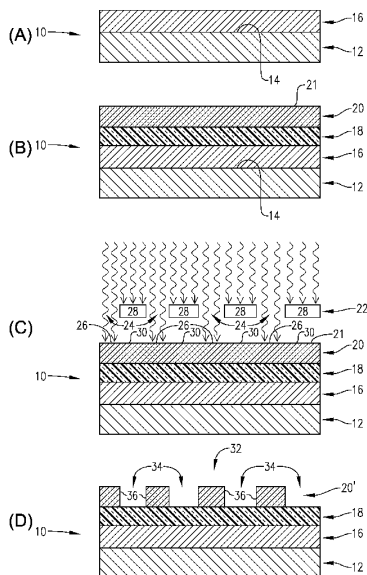


FIG. 1

(57) Abstract: Novel lithographic compositions for use as an EUV underlayer are disclosed. The invention includes methods of fabricating microelectronics structures using those compositions as well as structures formed by those methods. The method involves utilizing an underlayer immediately below the photoresist layer. The underlayer can either be directly applied to the substrate, or it can be applied to any intermediate layer(s) that may be applied to the substrate. The preferred underlayers are formed from spin-coatable, monomeric, oligomeric, and/or polymeric compositions and exhibit uniform thicknesses and low roughness. The disclosed method enables a 14/28 nm pattern using EUV lithography and better depth of focus (DOF) than standard EUV underlayers.

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