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65

-continued
$$\begin{array}{c} \text{-continued} \\ \text{OH} \\ \end{array}$$

$$\begin{array}{c} \text{OH} \\ \text{OH} \\ \end{array}$$

$$\begin{array}{c} \text{Polymer 2} \\ \text{Mw} = 8,100 \\ \text{Mw/Mn} = 1.65 \end{array}$$

Polymer 3

Mw = 7,900

Mw/Mn = 1.83

Examples and Comparative Examples

Resist compositions were prepared by dissolving the polymer and selected components in a solvent in accordance with the recipe shown in Tables 1 and 2, and filtering through a filter having a pore size of 0.2 µm. The solvent contained 100 ppm of surfactant FC-4430 (3M). The components in Tables 1 and 2 are as identified below. Organic Solvents:

PGMEA (propylene glycol monomethyl ether acetate)

GBL (γ-butyrolactone) CyH (cyclohexanone)

PGME (propylene glycol monomethyl ether)

Acid Generators:

PAG 1 to PAG 4 of the following structural formulae

PAG 3