

PELLICLE, EXPOSURE ORIGINAL PLATE, EXPOSURE DEVICE, AND SEMICONDUCTOR DEVICE MANUFACTURING METHOD

ABSTRACT

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A pellicle for EUV exposure that has a high transmittance to EUV light, causes little outgassing, and is not much contaminated, and a method for manufacturing the same are provided. A pellicle (100) includes a pellicle film (101); a support frame (103); and a first adhesive layer (109) provided at an end of the support frame, the end being opposite to an end on which the pellicle film is extended. The pellicle further includes an inorganic layer (111) on a side surface of the first adhesive layer, the side surface extending in a direction crossing a surface of the pellicle film, and the pellicle film being extended on the side surface. The inorganic layer has a mass absorption coefficient (μ_m) in the range of $5 \times 10^3 \text{ cm}^2/\text{g}$ to $2 \times 10^5 \text{ cm}^2/\text{g}$.

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Figure 1B