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**Nakamura et al.**

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(54) **OPTICAL DEVICE FOR MICROSCOPIC OBSERVATION**

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(57) **ABSTRACT**

An optical device for microscopic observation 4 comprises: a cold stop 13 having openings 13d, 13e corresponding to a low-magnification microscope optical system 5 and being a stop member arranged in a vacuum vessel 12 to let the light from the sample S pass to the camera 3; a warm stop 10 having an opening 14 corresponding to a high-magnification microscope optical system 5 and being a stop member arranged outside the vacuum vessel 12 to let the light from the sample S pass toward the cold stop 13; and a support member 11 supporting the warm stop 10 so that the warm stop can be inserted to or removed from on the optical axis of the light from the sample S, wherein the warm stop 10 has a reflective surface 15 on the camera 3 side and wherein the opening 14 is smaller than the openings 13d, 13e.

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