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Abstract (en)
[origin: WO2007045499A1] The invention relates to a microscope or stereomicroscope for representing an object that can be placed on an object plane (1) of the stereomicroscope, the latter providing at least one pair of optical paths (2a, 2b, 2c, 2d) and comprising at least one deflection element with a reflecting surface (3; 3') and a representation system (26; 26*; 26**; 26') containing several optical elements. The optical elements comprise a plurality of lenses (4-8, 11, 13, 14, 16'-21', 16"-21", 16'''-21''' 16''''-21''''). In addition, the optical elements are configured in such a way, that pupil planes (27a, 27b) of the optical representation paths (2a, 2b) intersect the reflecting surface (3; 3') of the deflection element or are located at a distance (S, S'; S*, S'') from said reflecting surface (3; 3'). The distance (S, S'; S*, S'') is less than 1.5 times, in particular less than 1.0 and in particular less than half the diameter (D) of one of the reflecting surfaces (3; 31) along the optical representation paths (2a, 2b, 2c, 2d) on the closest lens (4) of the plurality of lenses (4-8, 11, 13, 14, 16'-21' 16"- 21", 16'''-21'''', 16''''-21'''). The invention also relates to a stereomicroscope with a particularly compact construction, in which at least one pair of optical representation paths (2a, 2b, 2c, 2d) is reflected on a first, second, third and fourth reflecting surface (3, 9, 10, 12). The invention also relates to a microscope, in which a pupil representation takes place in the vicinity of a reflecting surface.

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See references of WO 2007045499A1

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• JP H07140395 A 19950602 - OLYMPUS OPTICAL CO
• US 6560013 B1 20030506 - RAMSBOTTOM ANDREW PAUL [GB]

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