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(54) Title (EN): ILLUMINATING APPARATUS AND ENDOSCOPE APPARATUS

(54) Title (FR): APPAREIL D'ÉCLAIRAGE ET ENDOSCOPE

(54) Title (JA): 照明装置及び内視鏡装置

(57) Abstract:

(EN): An illuminating apparatus (1a) is provided with a light source section (21) for outputting excitation light; a fluorescent member (22) excited by the excitation light to emit illuminating light; a first light transmitting section (24), which is arranged between the light source section (21) and the fluorescent member (22) and guides the excitation light emitted from the light source section (21) to the fluorescent member (22); and a second light transmitting section (25), which is arranged closer to the leading edge than the fluorescent member (22) and guides the illuminating light emitted from the fluorescent member (22). Thus, in the illuminating apparatus and an endoscope apparatus, a laser beam emitted from the light source section is not directly applied to the external, even when a bent portion or a leading edge of the bent portion is broken at an inserting section, and illuminating light can be applied by exciting the fluorescent member.

(FR): L'invention porte sur un appareil d'éclairage (1a) comportant une section de source lumineuse (21) destinée à émettre une lumière d'excitation ; un élément fluorescent (22) excité par la lumière d'excitation et destiné à émettre une lumière d'éclairage ; une première section de transmission de lumière (24), agencée entre la section de source lumineuse (21) et l'élément fluorescent (22) et guidant la lumière d'excitation émise par la section de source lumineuse (21) vers l'élément fluorescent (22) ; et une seconde section de transmission de lumière (25), agencée plus proche du bord avant que l'élément fluorescent (22) et guidant la lumière d'éclairage émise à partir de l'élément fluorescent (22). Ainsi, dans l'appareil d'éclairage et l'endoscope, on n'applique pas directement vers l'extérieur un faisceau laser émis par la section de source lumineuse, même si une partie incurvée ou un bord d'attaque de la partie incurvée est cassé au niveau d'une section d'insertion, et on peut appliquer une lumière d'éclairage par excitation de l'élément fluorescent.

(JA): 照明装置(１ａ)は、励起光を射出する光源部(２１)と、励起光によって励起されて照明光を放出する蛍光部材(２２)と、光源部(２１)と蛍光部材(２２)との間に配設され、光源部(２１)からの励起光を蛍光部材(２２)まで導光する第一の光伝送部(２４)と、蛍光部材(２２)よりも先端側に配設されて、蛍光部材(２２)からの照明光を導光する第二の光伝送部(２５)とを備える。本発明によれば、挿入部において、湾曲部や湾曲部の先端側が損傷しても、光源部からの

レーザ光が外部に直接照射されることなく、蛍光部材を励起させて照明光を照射可能な照明装置及び内視鏡装置を提供することが可能である。

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