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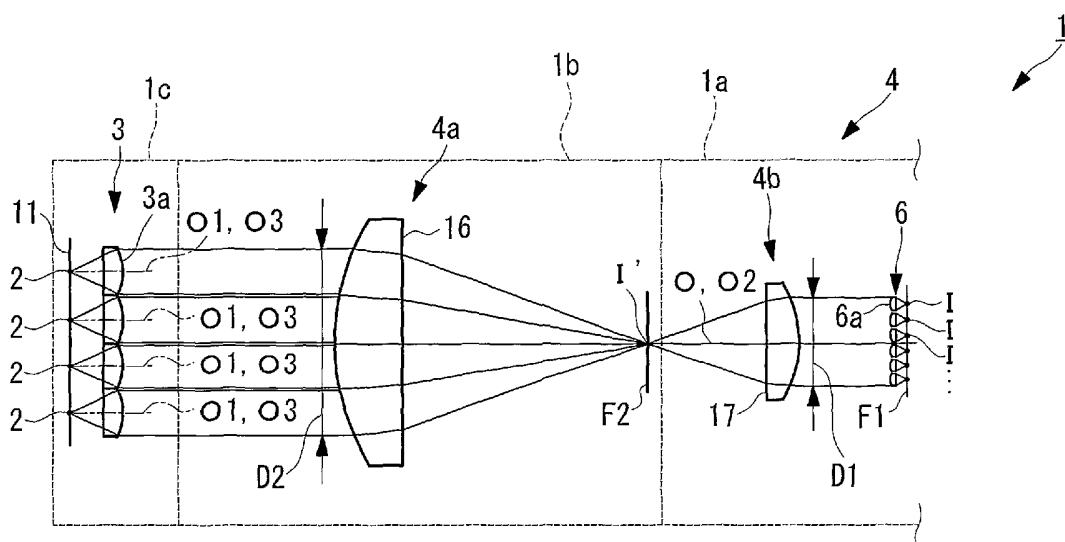
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(54) Title: ILLUMINATION OPTICAL APPARATUS AND OPTICAL APPARATUS



(57) **Abstract:** There are provided an illumination optical apparatus and an optical apparatus using this illumination optical apparatus that are capable of efficiently collecting light emitted from a light-emitting section (2) for illumination with less illumination nonuniformity, without having to employ a complicated structure. There are provided a light-emitting sections (2); a lens system (3) for converting a diverging beam emitted from the light-emitting section into a beam of collimated light; an afocal optical system (4a, 4b) for adjusting the cross-sectional area of a beam of collimated light obtained by the lens array (3); a fly-eye lens (6) for forming a plurality of light-source images (I) from the collimated light whose cross-sectional area is adjusted by the afocal optical system; and a Koehler illumination optical system that uses the plurality of light-source images (I) formed by the fly-eye lens (6) as a light source.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	US 4 851 978 A (ICHIHARA ET AL) 25 July 1989 (1989-07-25) abstract figure 1 column 3, lines 10-41	1, 11
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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