Title (en)

HOLLOW SURFACE ILLUMINATOR

Title (de)

HOHLRAUMFLÄCHIGE LICHTQUELLE

Title (fr)

ILLUMINATEUR A SURFACE CREUSE

Publication

EP 1303725 A2 20030423 (EN)

Application

EP 01961683 A 20010720

Priority

- JP 2000225276 A 20000726
- US 0123022 W 20010720

Abstract (en)

[origin: WO0208663A2] A light-conducting unit which can effectively balance the light-leaking effect and the light-propagation effect of the prismatic films forming the light-conducting space, and satisfy the requirements to reduce the weight of the unit is disclosed. A light-conducting unit comprising the first prismatic film and the second prismatic film, each having two major surfaces, one of which is a prismatic surface, and the other of which is a flat surface, said prismatic surface carrying prisms arranged substantially parallel to each other, wherein said two prismatic films are arranged so that the first edges of said prismatic films are positioned to form an opening, a light-conducting space is formed between said prismatic films, and the height of said light-conducting space does not substantially increase from said opening to the remote edges of the prismatic films opposing said opening, and the major surface of said first prismatic film which faces outside said light-conducting space is a light-emitting surface, and the arrangement of the both prismatic films and the directions of the prisms of the both prismatic films in relation to the incident direction of light are defined under the specific conditions.

[origin: WO0208663A2] A light-conducting unit (6) which can effectively balance the light-leaking effect and the light-propagation effect of the prismatic films (1, 2) forming the light-conducting space (3), and satisfy the requirements to reduce the weight of the unit is disclosed. A light-conducting unit (6) comprising the first prismatic film (1) and the second prismatic film (2), each having two major surfaces, one of which is a prismatic surface, and the other of which is a flat surface, said prismatic surface carrying prisms arranged substantially parallel to each other, wherein said two prismatic films (1, 2) are arranged so that the first edges (11, 21) of said prismatic films (1, 2) are positioned to form an opening (30), a light-conducting space (3) is formed between said prismatic films (1, 2), and the height of said light-conducting space (3) does not substantially increase from said opening (30) to the remote edges (12, 22) of the prismatic films (1, 2) opposing said opening (30), and the major surface of said first prismatic film (1) which faces outside said light-conducting space (3) is a light-emitting surface, and the arrangement of the both prismatic films (1, 2) and the directions of the prisms of the both prismatic films (1, 2) in relation to the incident direction of light (40) are defined under the specific conditions.

IPC 1-7

F21V 8/00

IPC 8 full level

F21V 8/00 (2006.01); **G02B 6/00** (2006.01); F21Y 101/00 (2016.01); F21Y 103/00 (2006.01)

CPC (source: EP KR)

G02B 6/00 (2013.01 - KR); **G02B 6/0033** (2013.01 - EP); **G02B 6/0053** (2013.01 - EP); **G02B 6/0096** (2013.01 - EP)

Citation (search report)

See references of WO 0208663A2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0208663 A2 20020131; **WO 0208663 A3 20020530**; AU 8293001 A 20020205; CN 1211675 C 20050720; CN 1444711 A 20030924; EP 1303725 A2 20030423; JP 2002050220 A 20020215; JP 4485026 B2 20100616; KR 20030026325 A 20030331; TW 512292 B 20021201

DOCDB simple family (application)

US 0123022 W 20010720; AU 8293001 A 20010720; CN 01813365 A 20010720; EP 01961683 A 20010720; JP 2000225276 A 20000726; KR 20037001127 A 20030125; TW 90118188 A 20010725