

Title (en)

ILLUMINATION ARRANGEMENT FOR ELIMINATION OF GRAY BORDERS IN A COPYING DEVICE

Publication

EP 0049146 B2 19880608 (EN)

Application

EP 81304467 A 19810928

Priority

- US 19155980 A 19800929
- US 24924481 A 19810330

Abstract (en)

[origin: EP0049146A1] In an illumination arrangement which includes a linear light transmitting array (16) the effects of gray borders on an imaging surface (24) are compensated for by locating a light-directing member (26) at at least one end of the linear transmitter entrance. In a first embodiment, reflective elements (26) are placed at the array ends so as to intrude (26a) a slight distance into the optical path. A portion of light from an illumination source (18) is reflected from these elements to eliminate unwanted edge borders on an underlying imaging surface. In a second embodiment, a portion of light from the illumination source is directed by total internal reflection along one of the prism surfaces into one end of the linear transmitter. This light is transmitted through the transmitter and dissipates the gray borders created by edge illumination of the document being copied.

IPC 1-7

G03G 15/30; G03B 27/70

IPC 8 full level

G03G 15/047 (2006.01)

CPC (source: EP)

G03G 15/047 (2013.01)

Cited by

EP0234575A3; US4814815A

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0049146 A1 19820407; EP 0049146 B1 19851121; EP 0049146 B2 19880608; DE 3173011 D1 19860102

DOCDB simple family (application)

EP 81304467 A 19810928; DE 3173011 T 19810928