

Title (en)

FILM RECORDER LIGHT SOURCE BASED ON FIELD EMISSION CATHODE

Title (de)

AUF EINE FELDEMISSIONSKATHODE BASIERENDE LICHTQUELLE FÜR OPTISCHE DRUCKER

Title (fr)

SOURCE DE LUMIERE POUR ENREGISTREUR DE FILM DOTEE D'UNE CATHODE A EMISSION PAR EFFET DE CHAMP

Publication

EP 0783762 A1 19970716 (EN)

Application

EP 95935200 A 19950929

Priority

- US 9512477 W 19950929
- US 31662694 A 19940930

Abstract (en)

[origin: WO9610835A1] A print head utilizing a field emission CRT for an optical printer for printing on photosensitive surfaces is disclosed herein. A plurality of small electron sets consisting of cathode emitting cones (26) in an anode aperture form a gap which is less than the electron mean free path in ambient atmosphere and the sets are preferably closely spaced to form a substantially columnated beam. A third electrode preferably accelerates and cleans up the beam which is separated from the cathode (24). The beam is then incident upon a luminophor film (34) which is excited, thereby generating light. The light is transmitted through a transmissive face plate (36) such as a fiber optic face plate where it is incident upon the photosensitive material. Multiple transmissions of a single color is also described to speed printing by time delay integration.

IPC 1-7

H01J 1/30; **H01J 31/12**

IPC 8 full level

H01J 1/304 (2006.01); **H01J 29/08** (2006.01); **H01J 31/12** (2006.01)

CPC (source: EP)

H01J 1/3042 (2013.01); **H01J 29/085** (2013.01); **H01J 31/127** (2013.01)

Citation (search report)

See references of WO 9610835A1

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

WO 9610835 A1 19960411; CA 2200957 A1 19960411; EP 0783762 A1 19970716

DOCDB simple family (application)

US 9512477 W 19950929; CA 2200957 A 19950929; EP 95935200 A 19950929