

Title (en)

LOW LIGHT LEVEL, HIGH RESOLUTION IMAGER.

Title (de)

HOCHAUFLÖSENDE BILDROHRE FÜR GERINGE LICHTINTENSITÄT.

Title (fr)

IMAGEUR HAUTE RESOLUTION A BAS NIVEAU DE LUMIERE.

Publication

**EP 0544739 B1 19941214**

Application

**EP 91914906 A 19910821**

Priority

- FR 9010593 A 19900823
- FR 9100680 W 19910821

Abstract (en)

[origin: WO9203836A1] Low light level, high resolution imager of the type comprising a light amplification tube (300) with a photocathode (310), at least one microchannel wafer serving as an electron amplifier, and a luminescent phosphor screen (340) having a metallic layer (342), an electronic camera (400) comprising a photosensitive matrix network (410) capable of transforming a received photon into an electron, and means for controlling (700) the electronic camera, characterized in that the control means (700) comprises an amplifier (710) sensitive to electrons collected on the metallic layer (342) of the luminescent phosphor screen (340) to control the integration cycles of the photosensitive matrix network (410) in synchronized, repetitive single-shot mode on the appearance of photons at the entrance of the light amplification tube (300).

IPC 1-7

**H01J 31/50**; G01T 1/28; G01N 23/04

IPC 8 full level

**G01T 1/20** (2006.01); **H01J 31/50** (2006.01)

CPC (source: EP US)

**H01J 31/50** (2013.01 - EP US); **H01J 2231/50015** (2013.01 - EP US); **H01J 2231/50063** (2013.01 - EP US); **H01J 2231/50094** (2013.01 - EP US); **H01J 2231/5016** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

**WO 9203836 A1 19920305**; AT E115769 T1 19941215; DE 69105983 D1 19950126; DE 69105983 T2 19950720; EP 0544739 A1 19930609; EP 0544739 B1 19941214; FR 2666170 A1 19920228; FR 2666170 B1 19921211; JP 3141205 B2 20010305; JP H06500424 A 19940113; US 5294788 A 19940315

DOCDB simple family (application)

**FR 9100680 W 19910821**; AT 91914906 T 19910821; DE 69105983 T 19910821; EP 91914906 A 19910821; FR 9010593 A 19900823; JP 51436091 A 19910821; US 97593093 A 19930416