

Title (en)

DETERMINING A PULSE TIMING FUNCTION FOR A LINEAR PRINthead

Title (de)

BESTIMMUNG EINER IMPULSZEITSTEUERUNGSFUNKTION FÜR EINEN LINEAREN DRUCKKOPF

Title (fr)

DÉTERMINATION D'UNE FONCTION DE SYNCHRONISATION DES IMPULSIONS POUR UNE TÊTE D'IMPRESSION LINÉAIRE

Publication

**EP 4020088 A1 20220629 (EN)**

Application

**EP 22157341 A 20180614**

Priority

- US 201715635560 A 20170628
- US 201715635596 A 20170628
- EP 18737476 A 20180614
- US 2018037435 W 20180614

Abstract (en)

A method is described for controlling a printhead including an array of light sources. An aim exposure function is provided which gives an aim exposure as a function of an integer pulse count. An initial pulse timing function is also provided which defines an exposure time as a function of pulse count. A light output function for the light sources is determined responsive to the pulse timing function, wherein the light output function gives a light output of the light sources as a function of exposure time. The pulse timing function is updated responsive to the light output function and the aim exposure function. The process is repeated until a predefined iteration termination criterion is satisfied. The determined pulse timing function is used to control the printhead, wherein each light source is activated for a pulse count corresponding to a pixel code value of an associated image pixel.

IPC 8 full level

**G03G 15/043** (2006.01); **G03G 15/04** (2006.01)

CPC (source: EP)

**G03G 15/04054** (2013.01); **G03G 15/043** (2013.01)

Citation (applicant)

- US 9147232 B1 20150929 - KUO CHUNG-HUI [US], et al
- US 7830569 B2 201011109 - TAI HWAI-TZUU [US], et al
- US 7079281 B1 20060718 - NG YEE S [US], et al
- US 7079287 B1 20060718 - NG YEE S [US], et al
- US 8824907 B2 20140902 - KUO CHUNG-HUI [US], et al
- US 201615135607 A 20160422

Citation (search report)

- [X] US 2004046976 A1 20040311 - OHNO SEIJI [JP], et al
- [A] US 2005062831 A1 20050324 - ISHIBASHI HIDEYASU [JP], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2019005490 A2 20190103; WO 2019005490 A3 20190207; CN 111164518 A 20200515; CN 111164518 B 20221011;**  
EP 3646119 A2 20200506; EP 3646119 B1 20220223; EP 4020088 A1 20220629

DOCDB simple family (application)

**US 2018037435 W 20180614; CN 201880043701 A 20180614; EP 18737476 A 20180614; EP 22157341 A 20180614**