

Title (en)

Toner consumption calculator, image forming apparatus, and toner consumption calculation method

Title (de)

Tonerverbrauchsberechner, Bilderzeugungsvorrichtung und Tonerverbrauchsberechnungsverfahren

Title (fr)

Calculateur de consommation de toner, appareil de formation d'image et procédé de calcul de la consommation de toner

Publication

**EP 2592481 A3 20170607 (EN)**

Application

**EP 12184247 A 20120913**

Priority

JP 2011202566 A 20110916

Abstract (en)

[origin: EP2592481A2] A toner consumption calculator includes a plurality of line memories; a processor that sequentially records image data including a plurality of pixels into the line memories and processes the image data by sequentially reading the image data from the line memories; an exposing unit that performs exposure in accordance with the processed image data and forms a latent image based on the image data on an image carrier; and a counter that sequentially reads the image data from the line memories and counts toner consumption of a target pixel on the basis of light amounts of surrounding pixels of the target pixel. The processor reads the image data from the line memories L times (L is a natural number) and reads M pixels (M is a natural number) per line memory and per clock. M is equal to or larger than the number of surrounding pixels of the target pixel in a main-scanning direction. The counter reads the image data from the line memories L times, reads the M pixels per line memory and per clock, and counts the toner consumption of N target pixels ( $N \geq M$ ).

IPC 8 full level

**G03G 15/00** (2006.01)

CPC (source: EP)

**G03G 15/5058** (2013.01); **G03G 15/556** (2013.01)

Citation (search report)

- [XY] US 5708919 A 19980113 - YAMADA TAKANOBU [JP], et al
- [Y] JP 2007174571 A 20070705 - FUJI XEROX CO LTD
- [Y] US 2010119273 A1 20100513 - KOMAI KUNIHIRO [JP], et al

Cited by

US11156939B2; WO2020096585A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2592481 A2 20130515; EP 2592481 A3 20170607; EP 2592481 B1 20200311**; CN 103092042 A 20130508; CN 103092042 B 20150902; JP 2013064811 A 20130411; JP 5786583 B2 20150930

DOCDB simple family (application)

**EP 12184247 A 20120913**; CN 201210596626 A 20120917; JP 2011202566 A 20110916