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(54) Title: TONER CARTRIDGE HAVING A SHUTTER LOCK MECHANISM

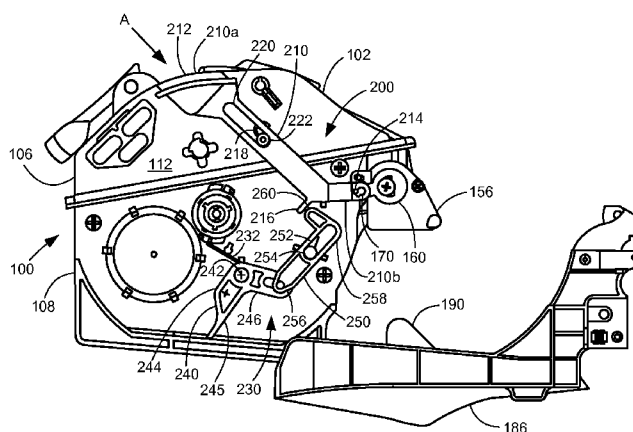


Figure 10

(57) Abstract: A toner cartridge for use in an image forming device according to one example embodiment includes a housing having a reservoir for containing toner therein. The housing has an exit port in fluid communication with the reservoir. A shutter is positioned at the exit port that is movable between an open position and a closed position. The shutter is biased toward the closed position. A linkage is operatively connected to the shutter to open the shutter upon being actuated by a first engagement feature in the image forming device. An interlock is operatively engaged with the linkage and biased toward a locked position preventing the linkage from opening the shutter. The interlock is movable to an unlocked position that is disengaged with the linkage when the interlock is actuated by a second engagement feature in the image forming device permitting the linkage to open the shutter.



INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G03G 15/08 (2012.01)

USPC - 399/260

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

USPC: 399/260

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 399/252, 258, 260, 262 (text search - see terms below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PatBase; PubWEST(USPT,PGPB,EPAB,JPAB); Google

Search Terms: toner, cartridge, shutter, gear, lock, interlock, housing, guide, leg, hold down, lever

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2009/0142103 A1 (CHAUDHURI et al.) 14 June 2009 (14.06.2009), entire document especially Fig 2; paras [0024]-[0025], [0032]-[0036]	1-15
Y	US 2008/0101821 A1 (GAYNE et al.) 01 May 2008 (01.05.2008), entire document especially para [0024]	1-15
Y	US 2007/0212118 A1 (NAGAE et al.) 13 September 2007 (13.09.2007), entire document especially para [0011]	2, 10
A	US 2006/0171744 A1 (IKEDA et al.) 03 August 2006 (03.08.2006), entire document especially para [0011]	1-15

☐ Further documents are listed in the continuation of Box C.

* Special categories of cited documents:

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