

Title (en)  
TONER CARTRIDGE AND MECHANISM FOR OPENING AND CLOSING COMMUNICATION PORT OF THE SAME

Title (de)  
TONERBEHÄLTER UND MECHANISMUS ZUM ÖFFNEN UND SCHLIESSEN EINER ANSCHLUSSÖFFNUNG VON DIESEM BEHÄLTER

Title (fr)  
CARTOUCHE DE TONER ET MECANISME SERVANT A OUVRIR ET A FERMER L'ORIFICE DE COMMUNICATION DE CETTE CARTOUCHE

Publication  
**EP 1006415 A1 20000607 (EN)**

Application  
**EP 98938900 A 19980819**

Priority

- JP 9803678 W 19980819
- JP 23886697 A 19970819
- JP 32707097 A 19971111

Abstract (en)  
A toner cartridge is provided which may surely and easily open and close a toner outlet when only the amount of toner corresponding to the amount used up in the device such as copying machines is supplied from the toner cartridge in sequence as needed, and which may preserve the toner without deterioration for a long period of time. By introducing toner through a toner discharge member 201 of the toner container 204, the toner container 204 is filled with the toner. A valve body 206 of the toner discharge member 201 includes a main fitting portion 209 of closing the outlet 208 by fitting in the outlet 208, and a connecting portion 213 adapted to be connected with a valve body operating member 211 of the device such as copiers. If the valve body operating member 211 of the device descends, the connecting portion 213 moves together with the valve body operating member 211 by contact with the latter to achieve a fitting connection between the main fitting portion and the outlet 208, thereby to ensure a closing to the outlet. <IMAGE>

IPC 1-7  
**G03G 15/08**; **G03G 15/10**

IPC 8 full level  
**G03G 15/08** (2006.01); **G03G 15/10** (2006.01)

CPC (source: EP KR)  
**G03G 15/08** (2013.01 - KR); **G03G 15/0868** (2013.01 - EP); **G03G 15/087** (2013.01 - EP); **G03G 15/0875** (2013.01 - EP);  
**G03G 15/0886** (2013.01 - EP); **G03G 15/104** (2013.01 - EP); **G03G 2215/0673** (2013.01 - EP); **G03G 2215/0678** (2013.01 - EP);  
**G03G 2215/0682** (2013.01 - EP)

Citation (search report)  
See references of WO 9909460A1

Cited by  
EP1527009A1; EP1129961A3; EP1691240A1; EP1626315A3; CN107020825A; US6519436B2; US7694852B2; EP1993003A3; KR100879870B1; SG152041A1; KR100869437B1; KR100870379B1; EP2216690A3; EP2270607A3; EP1233310A3; WO2004011361A1; US9827582B2; US10272460B2; US7577379B2; US7184691B2; US11518597B2; US11673727B2; US11874613B2; EP1229402B1; US7324777B2; US7376369B2; US7382997B2; US7386251B2; US7430384B2; US7433633B2; US7647012B2; EP1233310A2; US7127193B2; US7469113B2; US7881645B2; US7890027B2; US7965963B2; US7970321B2; US8045901B2; US8290394B2; EP1993003A2

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 9909460 A1 19990225**; CA 2300202 A1 19990225; EP 1006415 A1 20000607; KR 20010023020 A 20010326

DOCDB simple family (application)  
**JP 9803678 W 19980819**; CA 2300202 A 19980819; EP 98938900 A 19980819; KR 20007001628 A 20000217