

Title (en)  
Roller device for a toner cartridge

Title (de)  
Rollenvorrichtung für eine Tonerkartusche

Title (fr)  
Dispositif de galet pour cartouche de toner

Publication  
**EP 2065759 A1 20090603 (EN)**

Application  
**EP 07023118 A 20071129**

Priority  
EP 07023118 A 20071129

Abstract (en)  
A roller device (4, 4', 4", 4a) for a toner cartridge includes a spindle (41', 41") and a roller body (42', 42"). The roller body (42', 42") has a foam layer (422', 422") disposed around the spindle (41', 41"), and an outer tube (421', 421") disposed around the foam layer (422', 422"). Both of the outer tube (421', 421") and the foam layer (422', 422") are made of a thermoplastic material. The roller body (42', 42") has a bulk resistance ranging from 10 2 ohms to 10 10 ohms.

IPC 8 full level  
**G03G 15/02** (2006.01); **G03G 15/08** (2006.01); **G03G 15/16** (2006.01)

CPC (source: EP)  
**G03G 15/0233** (2013.01); **G03G 15/0818** (2013.01); **G03G 15/1685** (2013.01)

Citation (applicant)  

- US 6945921 B2 20050920 - SIREJACOB GINO [BE]
- US 5214239 A 19930525 - KOGA YOSHIRO [JP], et al
- EP 1205818 A2 20020515 - CANON KASEI KK [JP]
- WO 9743698 A1 19971120 - NIPPON ZEON CO [JP], et al
- GB 1052069 A
- JP 2001281963 A 20011010 - TOKAI RUBBER IND LTD
- US 5617191 A 19970401 - MURAKAMI EISAKU [JP], et al

Citation (search report)  

- [XY] US 5214239 A 19930525 - KOGA YOSHIRO [JP], et al
- [Y] EP 1205818 A2 20020515 - CANON KASEI KK [JP]
- [Y] GB 1052069 A
- [Y] JP 2001281963 A 20011010 - TOKAI RUBBER IND LTD
- [Y] US 5617191 A 19970401 - MURAKAMI EISAKU [JP], et al
- [A] WO 9743698 A1 19971120 - NIPPON ZEON CO [JP], et al

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
**EP 2065759 A1 20090603**

DOCDB simple family (application)  
**EP 07023118 A 20071129**