

Title (en)  
Color image forming apparatus.

Title (de)  
Farbbilderzeugungsvorrichtung.

Title (fr)  
Appareil de formation d'images à couleurs.

Publication  
**EP 0397465 A1 19901114 (EN)**

Application  
**EP 90304984 A 19900509**

Priority  

- JP 11712489 A 19890509
- JP 13533489 A 19890529
- JP 19765789 A 19890729

Abstract (en)  
A color image forming apparatus for forming a color image comprising; an image retainer (2) for carrying the color image, a charger for charging a surface (3) of the image retainer, a latent image former (20) for forming a latent image on the charged surface of the image retainer (2), a multicolor developer (4, 5, 6) for developing the latent image, a black developer (8) for developing the latent image, a transfer sheet conveyer (40) for conveying a transfer sheet and transferring the developed latent image onto the transfer sheet, and a cleaner (10) for cleaning a residual developer on the surface of the image retainer, in which the image retainer, either one of the black developer or the multicolor developer, and the cleaning means are formed as a detachable processing cartridge, and the rest of the black developer or the multicolor developer is detachable to the body of the color image forming apparatus.

IPC 1-7  
**G03G 15/00; G03G 15/01**

IPC 8 full level  
**G03G 15/01** (2006.01); **G03G 15/08** (2006.01); **G03G 21/18** (2006.01)

CPC (source: EP)  
**G03G 15/01** (2013.01); **G03G 15/0896** (2013.01); **G03G 21/1628** (2013.01); **G03G 21/1647** (2013.01); **G03G 21/1807** (2013.01);  
**G03G 21/1817** (2013.01); **G03G 21/1853** (2013.01); **G03G 2221/1603** (2013.01); **G03G 2221/1654** (2013.01); **G03G 2221/1687** (2013.01);  
**G03G 2221/18** (2013.01); **G03G 2221/1853** (2013.01); **G03G 2221/1861** (2013.01)

Citation (search report)  

- [A] EP 0287122 A2 19881019 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [A] EP 0293597 A1 19881207 - RICOH KK [JP]
- [A] PATENT ABSTRACTS OF JAPAN

Cited by  
EP0649069A3; US6064843A; EP0411825A3; US5168308A; EP0639801A1; US5537188A; US5734949A; US5745823A; US6016412A;  
EP0520802B1

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 0397465 A1 19901114; EP 0397465 B1 19941026**; DE 69013565 D1 19941201; DE 69013565 T2 19950330; DE 69032546 D1 19980910;  
DE 69032546 T2 19990218; EP 0602016 A2 19940615; EP 0602016 A3 19950510; EP 0602016 B1 19980805

DOCDB simple family (application)  
**EP 90304984 A 19900509**; DE 69013565 T 19900509; DE 69032546 T 19900509; EP 94103206 A 19900509