

Title (en)  
Toner concentration detection.

Title (de)  
Tonerkonzentrationsermittlung.

Title (fr)  
Détection de la concentration de toner.

Publication  
**EP 0292130 A2 19881123 (EN)**

Application  
**EP 88303863 A 19880428**

Priority  
JP 7486987 U 19870519

Abstract (en)  
A toner concentration detecting device for detecting a toner concentration of a two component developer includes a differential transformer (1) which is connected to an oscillating drive (2) and a phase detecting circuit (3). A variable capacitance diode (VCD) is connected between a primary coil (101) and the secondary coils (102, 103) and a variable resistor (VR) is provided to supply the variable capacitance diode (VCD) with a variable DC voltage thereby to select the capacitance of the diode (VCD).

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

IPC 8 full level  
**G01N 27/00** (2006.01); **G01N 27/72** (2006.01); **G03G 15/08** (2006.01)

CPC (source: EP)  
**G03G 15/0853** (2013.01)

Cited by  
US5648514A

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 0292130 A2 19881123; EP 0292130 A3 19890614; EP 0292130 B1 19921230**; DE 3877054 D1 19930211; DE 3877054 T2 19930429;  
JP H0633484 Y2 19940831; JP S63187160 U 19881130

DOCDB simple family (application)  
**EP 88303863 A 19880428**; DE 3877054 T 19880428; JP 7486987 U 19870519