

Title (en)
Electrostatic dispensing apparatus and method

Title (de)
Vorrichtung und Verfahren zum elektrostatischem Beschichten

Title (fr)
Dispositif et procédé d'application par voie électrostatique

Publication
EP 0919288 A3 20031008 (EN)

Application
EP 98121648 A 19981112

Priority
US 97779697 A 19971125

Abstract (en)
[origin: EP0919288A2] An electrostatic dispensing system (10) for dispensing flowable material (12) on a moving substrate. The electrostatic dispensing system preferably includes a dispensing nozzle (16) supported in spaced, non-contacting relationship on one side of the moving substrate (14) and an electrostatic field generator (26) supported in spaced, non-contacting relationship on the opposite side of the moving substrate (14). The electrostatic field generator (26) is operable to generate an electrostatic field through the moving substrate (14), which itself is substantially non-conductive, for attracting flowable material (12) from the dispensing nozzle (16) in a series of spaced, continuous streams or beads (24) which intersect a surface of the moving substrate (14) facing the nozzle (16). The beads of flowable material (12) are deposited on the surface of the moving substrate (14) in a series of uniform, continuous beads (24) which are formed generally parallel to a direction of travel of the moving substrate (14). Methods of electrostatically dispensing flowable material on a moving substrate are also disclosed. <IMAGE>

IPC 1-7
B05B 5/08; B05B 5/10; B05B 5/14; B05C 5/02

IPC 8 full level
B05D 3/14 (2006.01); **B05B 5/14** (2006.01); **B05C 5/00** (2006.01); **B05C 5/02** (2006.01); **B05C 9/08** (2006.01); **B05B 5/10** (2006.01)

CPC (source: EP)
B05B 5/001 (2013.01); **B05B 5/14** (2013.01); **B05C 5/0254** (2013.01); **B05C 5/027** (2013.01); **B05B 5/10** (2013.01)

Citation (search report)
• [XA] US 3484275 A 19691216 - LEWICKI WALTER J JR
• [XA] US 5552012 A 19960903 - MORRIS MARION C [US], et al
• [A] US 5209410 A 19930511 - WICHMANN FREDERICK R [US], et al
• [X] DE 2251148 A1 19740425 - ELEKTRISKA AB ELETTA
• [A] US 4335419 A 19820615 - HASTINGS EDWARD E

Cited by
CN109865633A; EP1166890A3; EP1656999A1; EP1152408A3; CN106132565A; CN107250655A; US10543505B2; US6620788B1; US6685794B2; WO2004037444A1; WO2008058911A1

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)
EP 0919288 A2 19990602; EP 0919288 A3 20031008; JP H11221507 A 19990817

DOCDB simple family (application)
EP 98121648 A 19981112; JP 33346198 A 19981125