

Title (en)
Print enhancement coating

Title (de)
Beschichtung zur Abdruckverbesserung

Title (fr)
Revêtement pour améliorer l'impression

Publication
EP 0842786 A1 19980520 (EN)

Application
EP 97119914 A 19971113

Priority
US 3099796 P 19961115

Abstract (en)
A print enhancement coating which includes from 0 to 100 percent by weight of a polyvalent metal ion salt, from 0 to 100 percent by weight of a cationic polymer, and from 0 to 100 percent by weight of a viscosity modifier, all based on the total dry weight of the coating. The coating also may include a nonionic or cationic surfactant. When present, the ink viscosity modifier may be a poly(ethylene oxide) having a weight-average molecular weight of from about 10,000 to about 200,000 or a low to medium viscosity poly(vinyl alcohol) having a degree of hydrolysis of less than about 90 percent. In certain embodiments, the print enhancement coating may include from about 4 to about 90 percent by weight of a polyvalent metal ion salt and from about 96 to about 10 percent by weight of a cationic polymer. The present invention also provides a printable material which includes a first layer having a first side and a second side, a second layer overlaying the first surface of the first layer; and a third layer overlaying the second layer. The second layer includes particles of a thermoplastic polymer having largest dimensions of less than about 50 μm and from about 10 to about 50 weight percent of a film-forming binder, based on the weight of the thermoplastic polymer. The third layer is the print enhancement coating described above.

IPC 1-7
B41M 5/00

IPC 8 full level
B41M 5/00 (2006.01); **B05D 5/04** (2006.01); **B41M 5/50** (2006.01); **B41M 5/52** (2006.01); **C08J 7/04** (2006.01); **D06P 5/24** (2006.01)

CPC (source: EP)
B41M 5/506 (2013.01); **B41M 5/52** (2013.01); **D06P 5/003** (2013.01); **B41M 5/5218** (2013.01); **B41M 5/5227** (2013.01); **B41M 5/5245** (2013.01)

Citation (search report)

- [Y] US 5501902 A 19960326 - KRONZER FRANCIS J [US]
- [XY] EP 0199874 A1 19861105 - MEAD CORP [US]
- [X] EP 0164196 A1 19851211 - MEAD CORP [US]
- [X] EP 0184797 A2 19860618 - POLAROID CORP [US]
- [X] EP 0704316 A1 19960403 - EASTMAN KODAK CO [US]
- [X] GB 2147003 A 19850501 - RICOH KK
- [XP] WO 9701447 A1 19970116 - KIMBERLY CLARK CO [US]
- [X] DATABASE WPI Week 9439, Derwent World Patents Index; AN 94313378, XP002056115

Cited by
AU762640B2; US10156040B2; US6699537B2; US6838498B1; US6936648B2; WO0069646A1; WO0056972A1; US6773769B1; US7141280B2

Designated contracting state (EPC)
BE DE ES FR GB IT NL SE

DOCDB simple family (publication)
EP 0842786 A1 19980520; JP H10166721 A 19980623

DOCDB simple family (application)
EP 97119914 A 19971113; JP 31505697 A 19971117