

Title (en)
Heat sensitive recording material

Title (de)
Wärmeempfindliches Aufzeichnungsmaterial

Title (fr)
Matériau pour l'enregistrement par la chaleur

Publication
EP 2279877 B1 20120328 (DE)

Application
EP 09166559 A 20090728

Priority
EP 09166559 A 20090728

Abstract (en)
[origin: EP2279877A1] The heat-sensitive recording material comprises a substrate, a heat-sensitive recording layer comprising color formers and color acceptors, a protective layer formed on the recording layer. The recording layer comprises 66.2 to 3 wt.% of 4, 4'-dihydroxydiphenylsulfon as color acceptors related to the total portion of the color acceptor in the heat-sensitive recording layer. The protective layer consists of 60 wt.% of diacetone-modified polyvinylalcohol as binder related to the total portion of the binder. The heat-sensitive recording layer has a sensitizer. The heat-sensitive recording material comprises a substrate, a heat-sensitive recording layer comprising color formers and color acceptors, a protective layer formed on the recording layer. The recording layer comprises 66.2/3 wt. % of 4, 4'-dihydroxydiphenylsulfon as color acceptors related to the total portion of the color acceptor in the heat-sensitive recording layer. The protective layer consists of 60 wt.% of diacetone-modified polyvinylalcohol as binder related to the total portion of the binder. The heat-sensitive recording layer has a sensitizer. The protective layer consists of inorganic pigment. The ratio of the inorganic pigment and diacetone-modified polyvinylalcohol is 1:1.5 to 1:4.5 related to the respective wt.% of pigment and polyvinylalcohol in the protective layer. A pigmented intermediate layer is formed between the substrate and the recording layer. The pigmented intermediate layer comprises organic pigment and inorganic pigment. The substrate is paper web with a portion of recycled fiber of 98 wt.% related to the total fiber content in the paper web. The recycled fiber of the paper web has a portion of unrecycled fiber from higher quality wastepaper sorts of 100 wt.%.

IPC 8 full level
B41M 5/333 (2006.01); **B41M 5/44** (2006.01)

CPC (source: EP US)
B41M 5/3336 (2013.01 - EP US); **B41M 5/44** (2013.01 - EP US)

Cited by
EP2784133A1; US9623696B2; WO2014154419A1; EP2487043A1; EP2487044A1; WO2012107504A1; WO2012107507A1; EP3263666A1; WO2018001687A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
EP 2279877 A1 20110202; **EP 2279877 B1 20120328**; AT E551201 T1 20120415; ES 2385179 T3 20120719; US 2011028317 A1 20110203; US 8603943 B2 20131210

DOCDB simple family (application)
EP 09166559 A 20090728; AT 09166559 T 20090728; ES 09166559 T 20090728; US 62155309 A 20091119