

Title (en)

Material for recording by engraving using coherent electromagnetic radiation, and printing plate prepared therewith

Title (de)

Material für die Gravur-Aufzeichnung mittels kohärenter elektromagnetischer Strahlung und Druckplatte damit

Title (fr)

Matériau pour l'enregistrement par gravure utilisant des rayons actiniques cohérents et plaque d'impression préparé l'utilisant

Publication

EP 0982124 A3 20010926 (DE)

Application

EP 99116468 A 19990821

Priority

DE 19838315 A 19980824

Abstract (en)

[origin: JP2000168253A] PROBLEM TO BE SOLVED: To improve the resolution of a material for gravure recording by constituting a polymeric binder contained in a crosslinkable layer of polyvinyl alcohol of which the hydrolysis degree is set at % of a specified range and/or a structural unit represented by a specified formula, and setting the ceiling temperature of a polymeric filler at less than a specified numeral value. SOLUTION: A crosslinkable layer which is formed on a substrate, and constitutes a material to record a gravure by CO2 laser as a coherent electromagnetic radiation, is made to contain at least one kind of a polymeric binder constituted of at least one kind of an ethylene based unsaturated compound, a polymerization starter, and polyvinyl alcohol of which the hydrolysis degree is 50-99%, and/or a at least one kind of a copolymer having a structural unit represented by a specified structural formula of a specific proportion. In addition, by containing a polymeric filler having a ceiling temperature which is less than 800K, especially less than 600K (polystyrene, polymethylmethacrylate or polyvinyl chloride or the like), a material which is extremely optimum for a typographic printing plate enabling laser gravure can be obtained.

IPC 1-7

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IPC 8 full level

B41C 1/05 (2006.01); **B41C 1/10** (2006.01); **B41M 1/02** (2006.01); **B41N 1/12** (2006.01); **B41N 1/22** (2006.01); **G03F 7/021** (2006.01); **G03F 7/027** (2006.01); **G03F 7/033** (2006.01); **G03F 7/11** (2006.01)

CPC (source: EP US)

B41C 1/05 (2013.01 - EP US); **Y10S 430/106** (2013.01 - EP US); **Y10S 430/11** (2013.01 - EP US); **Y10S 430/114** (2013.01 - EP US)

Citation (search report)

- [A] EP 0773112 A1 19970514 - AGFA GEVAERT NV [BE]
- [DA] WO 9323252 A1 19931125 - DU PONT [US]
- [X] DATABASE WPI Section Ch Week 199438, Derwent World Patents Index; Class A14, AN 1994-305696, XP002173139

Cited by

WO0216134A1; WO2005074499A2; US6989220B2; US6806018B2; US6913869B2

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