

Title (en)

A method for printing on a closure and a method for manufacturing a closure suitable for laser printing

Title (de)

Verfahren zum Bedrucken eines Verschlusses und Verfahren zur Herstellung eines Verschlusses für das Laserdrucken

Title (fr)

Méthode pour imprimer sur un dispositif de fermeture et méthode pour la fabrication d'un dispositif de fermeture pour l'impression par laser

Publication

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Application

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Priority

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Abstract (en)

A method for printing by means of a laser beam a character on an inside of a mono-component recipient closure, said closure being made of a plastic material comprising between 0,10 % by weight and 1,5 % by weight of a laser beam absorbent additive and a high density polyethylene or polypropylene and wherein said character is printed by having said material absorbing an energy emitted by said laser beam and situated in a range of 1J/cm² to 12J/cm², in particular between 2J/cm² and 5J/cm² so as to cause a colour change on the location where the laser beam is incident. <IMAGE>

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IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [XY] EP 0754562 A2 19970122 - QUARZWERKE GMBH [DE]
- [Y] EP 0684144 A1 19951129 - SODIREP SARL [FR]
- [A] DE 29508096 U1 19950803 - KUCHENBECKER KLAUS [DE]
- [Y] GRAFF G: "ADDITIVES MAKE POSSIBLE LASER MARKING OF POLYOLEFIN COMPONENTS", MODERN PLASTICS INTERNATIONAL, vol. 26, no. 4, April 1996 (1996-04-01), pages 24/25, XP000627075
- [Y] MVERS J: "LASERS MAKE THEIR MARK ON VARIETY OF PLASTICS PARTS", MODERN PLASTICS INTERNATIONAL, vol. 23, no. 10, 1 October 1993 (1993-10-01), pages 29/30, 32, XP000397542

Cited by

EP1321271A3; ES2336987A1; EP1022226A1; AU752536B2; AT412710B; US6528152B1; WO03024828A1; WO2010060123A1; WO2006066866A1; EP3466708A1; WO2019068815A1; EP3584089A1; WO2019243134A1

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