

Title (en)
Stopper made from a foamed thermoplastic material

Title (de)
Pfropfen aus geschäumtem thermoplastischem Kunststoff

Title (fr)
Bouchon en matière thermoplastique moussée

Publication
EP 1022226 A1 20000726 (DE)

Application
EP 00890002 A 20000104

Priority
AT 9799 A 19990125

Abstract (en)
Thermoplastic foam stoppers for bottles containing food, luxury goods or drinks, in which the plastic contains an added inorganic pigment which is resistant to foods or approved for use with food and which changes color under the action of heat. An Independent claim is also included for a method for applying a cork brand to stoppers as described, by exposing the stopper to heat in areas corresponding to a given brand pattern so as to activate the pigment color change in these areas.

Abstract (de)
Pfropfen aus geschäumtem thermoplastischem Kunststoff zum Verschließen von flüssige Lebensmittel, Genußmittel oder Getränke enthaltenden Flaschen, wobei dem Kunststoff ein lebensmittelechtes bzw. -taugliches, anorganisches, sich unter Wärmeeinwirkung verfärbendes Pigment zugesetzt ist. Verfahren zum Anbringen eines Korkbrands auf dem Pfropfen, der in einem vorgegebenen Muster eines Korkbrands entsprechenden Bereichen zur Farbaktivierung des Pigments einer Wärmeeinwirkung ausgesetzt wird.

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B65D 39/00 (2006.01); **B65D 51/24** (2006.01)

CPC (source: EP US)
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Citation (search report)

- [PX] EP 0947352 A1 19991006 - TETRA LAVAL HOLDINGS & FINANCE [CH]
- [A] WO 9425513 A1 19941110 - SUPREME CORQ [US]
- [A] WO 9634806 A1 19961107 - TAYLOR DAVID GRAHAM [GB], et al
- [A] EP 0754562 A2 19970122 - QUARZWERKE GMBH [DE]
- [A] EP 0684144 A1 19951129 - SODIREP SARL [FR]

Citation (third parties)
Third party :

- DE 4143258 A1 19930701 - HOECHST AG [DE]
- DE 4329395 A1 19950302 - HOECHST AG [DE]
- EP 0190997 A2 19860813 - CIBA GEIGY AG [CH]
- WO 8201696 A1 19820527 - PUPI MATIC SA [FR], et al
- EP 0156957 A2 19851009 - COCA COLA CO [US]
- DATABASE WEMA [online] XP002905839, accession no. FIZ Technik & WINKLER D.: "Status quo beim Laserbeschriften.", TECHNICA, vol. 37, no. 2, 1988, pages 54 - 56
- DATABASE DOMA [online] XP002905840, accession no. FIZ Technik WEB & DELP R.: "Funktionelle Pigmente zur Lasermarkierung von Kunststoffen", COATING, vol. 32, no. 7, 1999, pages 290 - 293

Cited by
AU2003243796B2; WO2006066866A1; WO2004007599A1

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