



(11) **EP 1 944 332 A8**

(12) **CORRECTED EUROPEAN PATENT APPLICATION**

(15) Correction information:
Corrected version no 1 (W1 A2)
Corrections, see
Bibliography INID code(s) 84

(51) Int Cl.:
C08J 7/06 (2006.01) **C08J 7/12** (2006.01)

(48) Corrigendum issued on:
30.06.2010 Bulletin 2010/26

(43) Date of publication:
16.07.2008 Bulletin 2008/29

(21) Application number: **08007363.8**

(22) Date of filing: **31.03.2000**

(84) Designated Contracting States:
DE FR GB

(30) Priority: **31.03.1999 JP 9103899**

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
00913042.8 / 1 179 558

(71) Applicants:
• **National Institute of Advanced Industrial Science
and Technology**
Tokyo 100-8921 (JP)
• **DAINICHISEIKA COLOR
& CHEMICALS MFG. CO. LTD.**
Chuo-ku,
Tokyo 103-8383 (JP)

(72) Inventors:
• **Hiraga, Takashi**
Ideka-shi
Osaka 563-8577 (JP)
• **Moriya, Tetsuo**
Amagasaki-shi
Hyogo 661-0974 (JP)
• **Chen, Qiying**
Tsukuba-city
Ibaraki 305-8562 (JP)

- **Tominaga, Junji**
Tsukuba-city
Ibaraki 305-8562 (JP)
- **Atoda, Nobufumi**
Tsukuba-city
Ibaraki 305-8562 (JP)
- **Tanaka, N.**
Dainichiseika C. & Chem. Mfg. Co., Ltd.
Tokyo 103-8383 (JP)
- **Yanagimoto, H.**
Dainichiseika C. & Mfg. Co., Ltd.
Tokyo 103-8383 (JP)
- **Ueno, Ichiro**
Victor Company of Japan, Ltd.
Yokohama-shi
Kanagawa 221-8528 (JP)
- **Tsujita, Koji**
Victor Company of Japan, Ltd.
Yokohama-shi
Kanagawa 221-8528 (JP)

(74) Representative: **HOFFMANN EITLE**
Patent- und Rechtsanwälte
Arabellastrasse 4
81925 München (DE)

Remarks:

This application was filed on 15-04-2008 as a
divisional application to the application mentioned
under INID code 62.

(54) **Method of modifying surface layer of molded resin**

(57) A modification method of the surface layer of a
molded resin article which comprises the steps of:
placing, in a first closed space, an organic compound
having sublimation properties and an affinity for a resin
of a molded resin article to be coated;

on the other hand, placing the molded resin article in a
second closed space;
controlling a temperature in the second closed space so
as to be equal to or higher than the temperature in the
first closed space;bringing a pressure in the first closed

EP 1 944 332 A8

space to a saturated sublimation pressure state of the organic compound;
controlling a pressure in the second closed space so as to be equal to or lower than the pressure in the first closed space;
subsequently, connecting the first closed space to the second closed space to form a third closed space in which the first closed space is combined with the second closed space, and further controlling the temperature and the pressure so that the whole of the third closed space may

be in the saturated sublimation pressure state of the organic compound;
allowing a vapor of the organic compound with which the first closed space before the connection is filled to diffuse into the second closed space before the connection;
uniformly depositing the vapor of the organic compound on the surface of the molded resin article; and
allowing the deposited organic compound to penetrate/disperse from the surface of the molded resin article into its inside.