

## Title (en)

ULTRAVIOLET CURING TRANSFER FILM, MANUFACTURING METHOD THEREFOR AND APPLICATION THEREOF

## Title (de)

UV-HÄRTENDE TRANSFERFOLIE, VERFAHREN ZU IHRER HERSTELLUNG UND ANWENDUNG

## Title (fr)

FILM DE TRANSFERT À DURCISSEMENT AUX ULTRAVIOLETS, PROCÉDÉ DE FABRICATION ET APPLICATION DE CELUI-CI

## Publication

**EP 2487042 A4 20130703 (EN)**

## Application

**EP 09847000 A 20091022**

## Priority

- CN 200910088641 A 20090706
- CN 2009074567 W 20091022

## Abstract (en)

[origin: EP2487042A1] The present invention pertains to finishing material field, in particular relates to an UV-curing transfer film, and a preparation method and an application of the UV-curing transfer film. Uniformly spread or print release agent on a substrate film, and then cure the release agent under infrared irradiation, to obtain a release agent layer on the substrate film; uniformly spread or print UV-curable ink that has patterns and decorative effect on the release agent layer, and then cure the ink under UV irradiation, to obtain an UV-curable ink decorative pattern layer; or, first, uniformly spread or print a layer of UV-curable protective paint that is scratch and wear resistant, cure the UV-curable protective paint under UV irradiation, and then uniformly spread or print UV-curable ink that has patterns and decorative effect on the UV-curable protective layer, and cure the UV-curable ink under UV irradiation; uniformly spread or print UV-curable background color paint on the UV-curable ink decorative pattern layer, and cure the UV-curable background color paint, so as to obtain an UV-curing transfer film, which can be used to produce UV-curing transfer film decorative boards/plates. The UV-curing transfer film provided in the present invention has advantages such as high material strength, high weather resistance, environmental protection, rich colors and patterns, full and rigid paint film, high scratch resistance, easy cleaning, and non-flammability, etc.

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## Citation (search report)

- [XYI] US 5560796 A 19961001 - YOSHIMURA YASUYUKI [JP]
- [IJ] JP H0978473 A 19970325 - TOKAI MASAHIRO
- [YA] GB 2010184 A 19790627 - TOPPAN PRINTING CO LTD
- [Y] US 6284327 B1 20010904 - NEUMANN PAUL [US], et al
- [A] WO 2009013580 A2 20090129 - FLOORING IND LTD SARL [LU], et al
- [A] US 1895419 A 19330124 - MITCHELL JOHN S, et al
- See references of WO 2011003249A1

## Cited by

CN112592630A; CN103613993A; EP2987642A4; WO2019236043A3; WO2017096016A1

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