

Title (en)

INK-JET RECORDING METHOD AND ACTINIC RAY CURABLE INK-JET INK SET

Title (de)

TINTENSTRAHLAUFZEICHNUNGSVERFAHREN UND DURCH AKTINISCHEN STRAHL HÄRTBARER TINTENSTRAHLTINTENSATZ

Title (fr)

PROCÉDÉ D'IMPRESSION À JET D'ENCRE ET KIT POUR JET D'ENCRE DURCISSABLE PAR RAYONNEMENT ACTINIQUE

Publication

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Application

EP 19184770 A 20190705

Priority

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Abstract (en)

Provided is an ink-jet recording method using an actinic ray curable ink-jet ink set having a first ink-jet ink containing at least titanium oxide and a gelling agent, and a second ink-jet ink containing a colorant other than titanium oxide, the ink-jet recording method containing the steps of: forming a lower print layer by printing the first ink-jet ink; forming an upper print layer on the lower print layer by printing the second ink-jet ink; and curing the lower print layer and the upper print layer by irradiating the lower print layer and the upper print layer with actinic rays, wherein an oxygen concentration in an atmosphere to which the actinic rays are irradiated is controlled to be 10 volume% or less in the step of curing the lower print layer and the upper print layer.

IPC 8 full level

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Citation (applicant)

- JP 2018132833 A 20180823 - NIPPON ANTENNA KK
- WO 2015156267 A1 20151015 - KONICA MINOLTA INC [JP]
- WO 2016098678 A1 20160623 - KONICA MINOLTA INC [JP]
- JP 2005126507 A 20050519 - KONICA MINOLTA HOLDINGS INC
- JP 2005255821 A 20050922 - KONICA MINOLTA HOLDINGS INC
- JP 2010111790 A 20100520 - KONICA MINOLTA HOLDINGS INC
- JP 2001220526 A 20010814 - BROTHER IND LTD
- JP 2001310937 A 20011106 - HITACHI CHEMICAL CO LTD
- "Imejingu yo Yuki Zaiyo (Organic Materials for Imaging", 1993, BUNSHIN PUBLISHING COMPANY, article "Japanese Research Association for Organic Electronics Materials, Ed", pages: 187 - 192

Citation (search report)

- [I] EP 3115220 A1 20170111 - KONICA MINOLTA INC [JP]
- [I] JP 2016172819 A 20160929 - KONICA MINOLTA INC
- [A] WO 2017164164 A1 20170928 - KONICA MINOLTA INC [JP]
- [A] JP 2016112701 A 20160623 - KONICA MINOLTA INC

Cited by

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