Title (en)

A transfer printing process by vibrations at ultrasonic frequencies.

Title (de)

Transferdruckverfahren mittels Ultraschallvibrationen.

Title (fr)

Procédé d'impression par tranfert au moyen de vibrations ultrasoniques.

Publication

EP 0170758 A1 19860212 (EN)

Application

EP 84830239 A 19840807

Priority

EP 84830239 A 19840807

Abstract (en)

A transfer printing or decalcomania process by which a drawing and/or wordings suitably painted or printed in usual manner on a base sheet or support are transferred onto a more or less porous surface by vibrations at ultrasonic frequencies, in order to be shown evenly and well defined. The process differs clearly from those of prior art as the transfer printing does not require a heating source but only ultrasonic vibrations the frequency of which agitates the molecules of the adhesive material or the thermoplastic ink being used to form the original drawing and/or wordings and fluidifies same so that they may penetrate the pores and accomplish the transfer onto that porous surface, the return to its original state being possible in a very short cooling time. The new process is intended to remedy the drawbacks of a possible uneven transfer printing when carried out according to the prior art, and is particularly intended to extend the application onto surfaces sensitive to heat, as well as to provide a much more economical production because of the remarkably shorter time required to carry out each operation while the results are more satisfactory.

IPC 1-7

B41M 5/025; B44C 1/17; D06B 11/00; D06B 13/00

IPC 8 full level

B41M 5/00 (2006.01); **B41M 5/025** (2006.01); **B44C 1/16** (2006.01); **B44C 1/165** (2006.01); **B44C 1/17** (2006.01); **D06B 11/00** (2006.01); **D06B 13/00** (2006.01)

CPC (source: EP)

B41M 5/025 (2013.01); **B44C 1/17** (2013.01); **D06B 11/0076** (2013.01); **D06B 13/00** (2013.01)

Citation (search report)

- [X] DE 2851583 A1 19800604 - LANG ALBERT
- [X] FR 2256838 A1 19750801 - HAGAMEX SARL [FR]
- [X] US 4060438 A 19771129 - JOHNSON CHARLES A
- [X] US 3653758 A 19720404 - TRIMMER DONALD S, et al
- [X] GB 1068557 A 19670510 - EASTMAN KODAK CO
- [A] GB 1372737 A 19741106 - MATSUSHITA ELECTRIC IND CO LTD
- [A] TEXTIL PRAXIS, October 1965, pages 840 - 848; K.RAMASZEDER: 'Die Anwendungsmöglichkeiten des Ultraschalls in der Textilindustrie'

Cited by

EP2163397A1; FR2715607A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0170758 A1 19860212; JP S6144698 A 19860304

DOCDB simple family (application)

EP 84830239 A 19840807; JP 18253384 A 19840831