

Title (en)

THERMAL TRANSFER RIBBON ASSEMBLY COMPRISING AN IMAGE LAYER AND A PROTECTIVE COATING LAYER

Title (de)

WÄRMEÜBERTRAGUNGSBANDANORDNUNG MIT EINER BILDSCHICHT UND EINER SCHUTZSCHICHT

Title (fr)

ENSEMBLE RUBAN DE TRANSFERT THERMIQUE COMPRENANT UNE COUCHE D'IMAGE ET UNE COUCHE DE REVÊTEMENT PROTECTEUR

Publication

EP 4234265 A1 20230830 (EN)

Application

EP 23158301 A 20230223

Priority

US 202217682403 A 20220228

Abstract (en)

A method for introducing a reflective, refractive, and/or diffractive variable and/or non-variable image to a substrate (102) by use of thermal transfer printing includes simultaneously transferring a defined portion (110A, 110B) of each of a protective coating layer (112), an image layer (114), and an adhesive layer (116) from a carrier film (126) of a transfer ribbon (108) to the substrate by applying heat (124) to the transfer ribbon. The defined portions of the image layer and the protective coating layer are adhered to the substrate using the adhesive layer. Subsequent to transferring the protective coating layer, the image layer, and the adhesive layer, durability is provided to the image layer by cross-linking the protective coating layer that is over the image layer by exposing the protective coating layer to a radiation source after the defined portions of the protective coating layer, the image layer, and the adhesive layer are transferred from the carrier film.

IPC 8 full level

B44C 1/16 (2006.01); **B44C 1/17** (2006.01)

CPC (source: CN EP)

B41M 5/025 (2013.01 - CN); **B44C 1/1729** (2013.01 - EP)

Citation (search report)

- [X] US 2020130366 A1 20200430 - SANGKARATANA SUWIT JOHN [US], et al
- [XP] US 2022176711 A1 20220609 - SANGKARATANA SUWIT JOHN [US], et al
- [XA] US 7410551 B1 20080812 - BETHUNE ALAIN [FR]
- [A] EP 2373492 B1 20150304 - OVD KINEGRAM AG [CH]
- [A] US 2008258457 A1 20081023 - COMMANDER LAWRENCE GEORGE [GB]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

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Designated validation state (EPC)

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