

Title (en)  
MULTI-LAYER RELEASE STACK FOR LIGHT INDUCED TRANSFER OF COMPONENTS

Title (de)  
MEHRSCHICHTIGER FREISETZUNGSSTAPEL ZUR LICHTINDUZIERTEN ÜBERTRAGUNG VON KOMPONENTEN

Title (fr)  
EMPILEMENT DE LIBÉRATION MULTICOUCHE POUR TRANSFERT INDUIT PAR LUMIÈRE DE COMPOSANTS

Publication  
**EP 4302323 A1 20240110 (EN)**

Application  
**EP 22709835 A 20220301**

Priority  
• EP 21160226 A 20210302  
• NL 2022050114 W 20220301

Abstract (en)  
[origin: US2024140081A1] A method and system for light induced transfer of components from a donor substrate to an acceptor substrate are described. The donor substrate includes a transparent carrier configured to carry the components facing the acceptor substrate, and a release stack. The release stack includes a light-absorbing layer, a melt layer, and an adhesive layer. The light-absorbing layer has a relatively high absorption coefficient for absorbing the light beam causing heat which is conducted to the melt layer. The light-absorbing layer has a relatively high melting temperature such that the light-absorbing layer can remain solid while the melt layer is melted. The adhesive layer adheres the components to the melt layer while the melt layer is solid and releases adhesion when the melt layer is melted.

IPC 8 full level  
**H01L 21/683** (2006.01); **H01L 25/075** (2006.01); **H01L 33/00** (2010.01)

CPC (source: EP US)  
**B32B 7/12** (2013.01 - US); **B32B 15/04** (2013.01 - US); **B32B 37/025** (2013.01 - US); **H01L 21/67132** (2013.01 - EP US); **H01L 21/6835** (2013.01 - EP); **B32B 2307/412** (2013.01 - US); **B32B 2307/748** (2013.01 - US); **B32B 2310/0837** (2013.01 - US); **H01L 25/0753** (2013.01 - EP); **H01L 33/0095** (2013.01 - EP); **H01L 2221/68322** (2013.01 - EP); **H01L 2221/68363** (2013.01 - EP); **H01L 2221/68381** (2013.01 - EP)

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 MK MT NL NO PL PT RO RS SE SI SK SM TR

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**US 202218279841 A 20220301**; CN 202280028278 A 20220301; EP 22709835 A 20220301; JP 2023553367 A 20220301