

Title (en)  
EXPANDABLE SLIT SHEET PACKAGING MATERIAL THAT INTERLOCKS WHEN LAYERED AND EXPANDED, METHOD AND APPARATUS FOR MAKING THE SAME

Title (de)  
VERPACKUNGSMATERIAL MIT EINER BEI DER SCHICHTUNG UND DEHNUNG VERNETZTEN DEHNBAREN GESCHLITZTEN FOLIE, VERFAHREN UND VORRICHTUNG ZUR DESSEN HERSTELLUNG

Title (fr)  
MATÉRIAU D'EMBALLAGE À FEUILLES FENDUES EXTENSIBLES QUI S'ENTRECROISENT QUAND ELLES SONT MISES EN COUCHES ET ÉTENDUES, MÉTHODE ET APPAREIL POUR SA FABRICATION.

Publication  
**EP 3041756 B1 20200212 (EN)**

Application  
**EP 14843068 A 20140908**

Priority  
• US 201361874873 P 20130906  
• US 2014054615 W 20140908

Abstract (en)  
[origin: WO2015035335A1] In accordance with a broad embodiment of the invention, a novel paper product is comprised of two or more slit sheet packing material layers, each layer having its own slit pattern design to create interlocking layers of expansion sheet packaging materials. Each layer expands to create a three dimensional open netting of cells of hexagons, and the like, and is designed to have limited nesting with its opposing layer, thereby maximizing the thickness of the combined layers as compared to nested layers. Adjacent layers have differing slit patterns and can be expanded through expander type machinery such that the expansion rates of the differing slit pattern layers can be varied to deliver the same width of exiting expanded material from each layer. Preferably the differing slit patterns produce when expanded, inclined land area that have the same number of rows per inch, but different angles of inclination of the land areas, such that adjacent layers can interlock, that is, have a restricted amount of nesting.

IPC 8 full level  
**B65D 65/02** (2006.01); **B31D 3/02** (2006.01)

CPC (source: EP)  
**B31D 3/0223** (2013.01); **B31D 3/0292** (2013.01); **B65D 65/02** (2013.01); **B65D 81/03** (2013.01)

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

DOCDB simple family (publication)  
**WO 2015035335 A1 20150312**; EP 3041756 A1 20160713; EP 3041756 A4 20170621; EP 3041756 B1 20200212; EP 3683166 A1 20200722

DOCDB simple family (application)  
**US 2014054615 W 20140908**; EP 14843068 A 20140908; EP 20156524 A 20140908