

Title (en)  
THREE-DIMENSIONAL PLASTIC SHEET

Title (de)  
DREIDIMENSIONALE KUNSTSTOFFFOLIE

Title (fr)  
FEUILLE PLASTIQUE TRIDIMENSIONNELLE

Publication  
**EP 1899161 A4 20090805 (EN)**

Application  
**EP 06716342 A 20060313**

Priority  
KR 2006000892 W 20060313

Abstract (en)  
[origin: WO2007105837A1] The present invention relates to a three-dimensional plastic sheet that forms an array of convex lenses having a plurality of semispherical convex lenses arranged horizontally and vertically on the surface thereof, such that a three-dimensional image can be vividly seen even at every positions irrespective of the position or direction of the plastic sheet, while greatly minimizing the generation of moire patterns caused by the interference of different color dots. The three-dimensional plastic sheet includes: a convex lens layer formed of a transparent synthetic resin and having an array of identical semi-spherical convex lenses formed on the top surface thereof; a transparent plate disposed at the bottom surface of the convex lens layer and formed of a synthetic resin plate having a thickness corresponding to a focal distance of each convex lens; a non-focal distance printed layer disposed on the top surface of the transparent plate by means of offset printing for providing a real picture screen thereon; and a focal distance printed layer disposed on the bottom surface of the transparent plate by means of the offset printing for providing a three-dimensional screen thereon through four-color dot printing computed and image-segmented by a computer graphic process.

IPC 8 full level  
**B44F 1/00** (2006.01); **B32B 27/00** (2006.01); **B32B 29/06** (2006.01)

CPC (source: EP)  
**B32B 3/14** (2013.01); **B32B 3/30** (2013.01); **B32B 27/08** (2013.01); **B44F 1/066** (2013.01); **G02B 3/0006** (2013.01); **B32B 2307/40** (2013.01); **B32B 2307/4023** (2013.01); **B32B 2307/412** (2013.01); **B32B 2307/75** (2013.01); **B32B 2559/00** (2013.01)

Citation (search report)  
• [Y] US 6450540 B1 20020917 - KIM CHUNG HWAN [KR]  
• [Y] US 5723200 A 19980303 - OSHIMA MASAHIRO [JP], et al  
• [A] WO 2005046971 A1 20050526 - PARK KYUNG TAE [KR]  
• See references of WO 2007105837A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2007105837 A1 20070920**; BR PI0621415 A2 20111206; CA 2645552 A1 20070920; CA 2645552 C 20131001; CN 101160208 A 20080409; CN 101160208 B 20100616; EP 1899161 A1 20080319; EP 1899161 A4 20090805; MX 2008011730 A 20090210

DOCDB simple family (application)  
**KR 2006000892 W 20060313**; BR PI0621415 A 20060313; CA 2645552 A 20060313; CN 200680012376 A 20060313; EP 06716342 A 20060313; MX 2008011730 A 20060313