

Title (en)  
SEMICONDUCTOR PACKAGE AND METHOD OF MANUFACTURING THE SAME

Title (de)  
HALBLEITERBGEHÄUSE UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)  
BOÎTIER DE SEMI-CONDUCTEUR ET SON PROCÉDÉ DE FABRICATION

Publication  
**EP 3243217 A4 20180110 (EN)**

Application  
**EP 16735133 A 20160104**

Priority  
• KR 20150003469 A 20150109  
• KR 20150088717 A 20150622  
• KR 2016000013 W 20160104

Abstract (en)  
[origin: KR20160086246A] Disclosed is a semiconductor package. The semiconductor package may include a semiconductor chip mounted on a substrate, an insulating layer which is adjacent to the semiconductor chip and includes a thixotropy material or a phase change material, and a shielding layer which covers the semiconductor chip and the insulating layer. Disclosed is a method for manufacturing a semiconductor package to manufacture the shielding layer and the insulating layer having high aspect ratio by using a 3D printer. So, the semiconductor package can be made thin and simple.

IPC 8 full level  
**H01L 21/56** (2006.01); **H01L 23/552** (2006.01); **H01L 23/60** (2006.01); **H04W 4/50** (2018.01)

CPC (source: CN EP US)  
**H01L 23/291** (2013.01 - CN EP US); **H01L 23/295** (2013.01 - CN EP); **H01L 23/552** (2013.01 - CN EP US); **H04W 4/50** (2018.01 - CN EP US); **H01L 21/56** (2013.01 - CN EP US); **H01L 23/3135** (2013.01 - EP); **H01L 24/16** (2013.01 - EP); **H01L 24/32** (2013.01 - EP); **H01L 24/48** (2013.01 - EP); **H01L 24/73** (2013.01 - EP); **H01L 24/81** (2013.01 - EP); **H01L 24/92** (2013.01 - EP); **H01L 25/0655** (2013.01 - CN EP US); **H01L 25/0657** (2013.01 - CN EP US); **H01L 25/105** (2013.01 - EP); **H01L 2224/04042** (2013.01 - EP); **H01L 2224/16145** (2013.01 - CN EP); **H01L 2224/16227** (2013.01 - CN EP); **H01L 2224/32145** (2013.01 - CN EP); **H01L 2224/32225** (2013.01 - CN EP); **H01L 2224/48091** (2013.01 - EP); **H01L 2224/48227** (2013.01 - CN EP US); **H01L 2224/73204** (2013.01 - EP); **H01L 2224/73265** (2013.01 - EP); **H01L 2224/81815** (2013.01 - CN EP); **H01L 2224/92125** (2013.01 - EP); **H01L 2225/0651** (2013.01 - CN EP US); **H01L 2225/06513** (2013.01 - CN EP); **H01L 2225/06517** (2013.01 - CN EP); **H01L 2225/06537** (2013.01 - CN EP); **H01L 2225/1023** (2013.01 - CN EP); **H01L 2225/1058** (2013.01 - CN EP); **H01L 2924/00014** (2013.01 - EP); **H01L 2924/14** (2013.01 - CN EP); **H01L 2924/1432** (2013.01 - EP); **H01L 2924/1433** (2013.01 - CN EP); **H01L 2924/1434** (2013.01 - EP); **H01L 2924/1436** (2013.01 - EP); **H01L 2924/1437** (2013.01 - EP); **H01L 2924/14511** (2013.01 - EP); **H01L 2924/15311** (2013.01 - CN EP); **H01L 2924/15331** (2013.01 - CN EP)

Citation (search report)  
• [X] US 2012120613 A1 20120517 - KUWABARA RYO [JP], et al  
• See references of WO 2016111512A1

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
CN 107112296 A 20170829; CN 107112296 B 20200804; EP 3243217 A1 20171115; EP 3243217 A4 20180110; KR 102474242 B1 20221206; KR 20160086246 A 20160719; TW 201637156 A 20161016; TW I691031 B 20200411

DOCDB simple family (application)  
CN 201680005436 A 20160104; EP 16735133 A 20160104; KR 20150088717 A 20150622; TW 105100334 A 20160107