Application Number
PCT/US2018/045346

TITLE: MOLDED DEVICE PACKAGE WITH AIR CAVTIY

APPLICANT: QUALCOMM INCORPORATED

IPC CLASSIFICATION: H01L23/16, H01L21/683, H01L23/31

EXAMINER: Crampin, Nicola

CONSULTED DATABASES: EPODOC, WPI

CLASSIFICATION SYMBOLS DEFINING EXTENT OF THE SEARCH:

IPC:

CPC: H01L23/16, H01L23/3121, H01L21/6835, H01L23/315, H01L23/31/IC, H01L23/16/IC

FI/F-TERMS:

KEYWORDS OR OTHER ELEMENTS FEATURING THE INVENTION:
chip package comprising chip mounted on package substrate with a dam (barrier or frame) structure located therebetween defining an air cavity bounded by the opposing surfaces of the package substrate and the chip and said dam (barrier or frame) structure; inner and outer sidewalls of the dam structure being vertical, the outer sidewalls being located aligned with or outside of the chip sidewalls; air cavity reduces stress due to CTE differences, improves performance of EMC filters due to and reduced dielectric constant; dam may be made of material (eg PR) which retains its shape, reducing bleed out and "keep-out" zone while increasing cavity size