

Title (en)
INTERCONNECTION FOR ACCOMODATING THERMAL EXPANSION FOR LOW ELASTIC MODULUS DIELECTRICS

Title (de)
VERBINDUNG ZUM ANPASSEN DER THERMISCHEN AUSDEHNUNG FÜR DIELEKTRIKUM MIT NIEDRIGEM ELASTIZITÄTSMODUL

Title (fr)
INTERCONNEXION PERMETTANT D'ADAPTER L'EXPANSION THERMIQUE POUR DES DIELECTRIQUES A FAIBLE MODULE D'ELASTICITE

Publication
EP 1374302 A2 20040102 (EN)

Application
EP 01953389 A 20010627

Priority
• US 0120354 W 20010627
• US 60453400 A 20000627

Abstract (en)
[origin: WO0201632A2] Damage to interconnect structures including vias and/or device interconnects through insulators having a low modulus of elasticity between materials having different coefficients of thermal expansion (CTEs) by providing bends or jogs in an interconnect which limit the axial length of the interconnect adjacent the via or device contact in accordance with the difference in CTEs. The interconnect thus limits the development of shear forces and serves to relieve them by flexure of the interconnect across portions of the narrow width of the interconnect; preventing concentration of shear forces near the via or device contact. Implementation as a design rule based on limitation of length of a straight segment of an interconnect trace is preferred.

IPC 1-7
H01L 23/52

IPC 8 full level
H01L 23/12 (2006.01); **H01L 23/528** (2006.01)

CPC (source: EP KR)
H01L 21/28 (2013.01 - KR); **H01L 23/528** (2013.01 - EP); **H01L 2924/0002** (2013.01 - EP)

Citation (search report)
See references of WO 0201632A2

Designated contracting state (EPC)
DE FR IT

DOCDB simple family (publication)
WO 0201632 A2 20020103; WO 0201632 A3 20031023; EP 1374302 A2 20040102; JP 2004507883 A 20040311; KR 100525212 B1 20051101; KR 20030020308 A 20030308; TW 529148 B 20030421

DOCDB simple family (application)
US 0120354 W 20010627; EP 01953389 A 20010627; JP 2002505678 A 20010627; KR 20027017781 A 20010627; TW 90115596 A 20010627