

reconstructive transition

A transition which involves a major reorganization of the crystal structure and a change of local topology, during which primary bonds are broken and reformed so that there is no immediate relationship between the crystal structures of the parent and product phases. Examples: The transition of Mg_2SiO_4 (olivine) to Mg_2SiO_4 (spinel); the transition of diamond to graphite.

Source:

PAC, 1994, 66, 577 (*Definitions of terms relating to phase transitions of the solid state (IUPAC Recommendations 1994)*) on page 589