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(54) Title: LASER ABLATION SYSTEM FOR PACKAGE FABRICATION

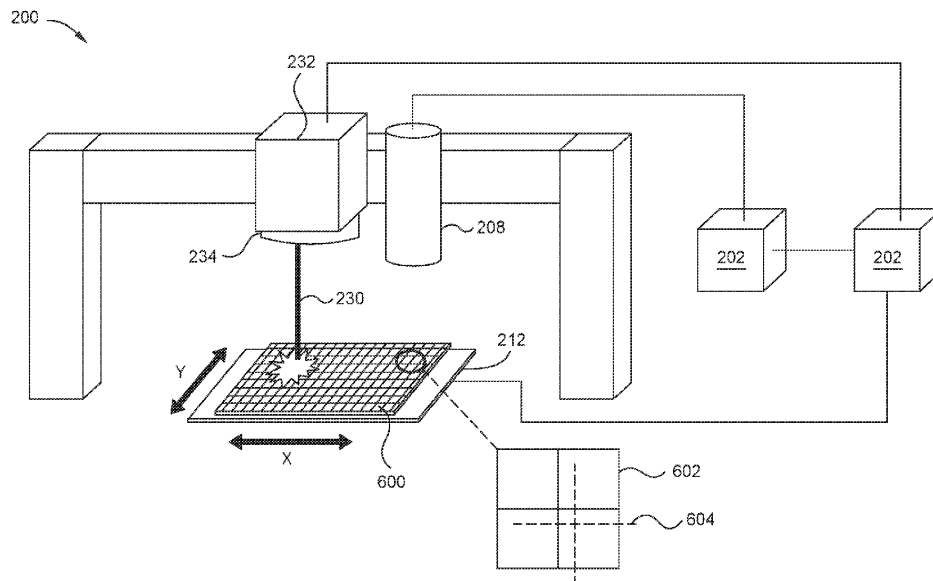


FIG. 6

(57) **Abstract:** The present disclosure relates to systems and methods for fabricating semiconductor packages, and more particularly, for forming features in semiconductor packages by laser ablation. In one embodiment, the laser systems and methods described herein can be utilized to pattern a substrate to be utilized as a package frame for a semiconductor package having one or more interconnections formed therethrough and/or one or more semiconductor dies disposed therein. The laser systems described herein can produce tunable laser beams for forming features in a substrate or other package structure. Specifically, frequency, pulse width, pulse shape, and pulse energy of laser beams are tunable based on desired sizes of patterned features and on the material in which the patterned features are formed. The adjustability of the laser beams enables rapid and accurate formation of features in semiconductor substrates and packages with controlled depth and topography.

[Continued on next page]

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