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7855 South River Parkway, Ste. 111, Tempe, AZ 85284
(US).(72) Inventors: SCANLAN, Christopher, M.; 2921 S. Illinois
Place, Chandler, AZ 85286 (US). OLSON, Timothy, L.;
333 E. Hiddenview Dr., Phoenix, AZ 85048 (US).(74) Agent: BOOTH, Kenneth, C.; Booth Udall Fuller, PLC,
1255 W. Rio Salado Pkwy., Ste. 215, Tempe, AZ 85281
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(54) Title: SEMICONDUCTOR DEVICE AND METHOD OF ADAPTIVE PATTERNING FOR PANELIZED PACKAGING

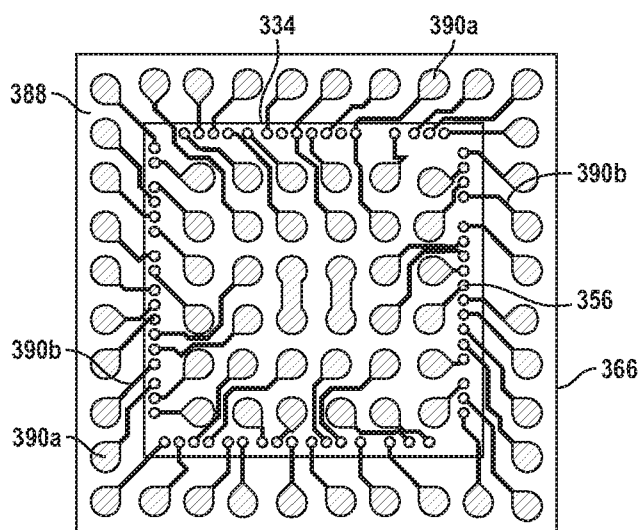


FIG. 13G

(57) Abstract: An adaptive patterning method and sys-
tem for fabricating panel based package structures is de-
scribed. A plurality of semiconductor die comprising a
copper column disposed over the active surface of each
semiconductor die is provided. An embedded die panel
is formed by disposing an encapsulant around each of
the plurality of semiconductor die. A true position and
rotation of each semiconductor die within the embedded
die panel is measured. A unit-specific pattern is formed
to align with the true position of each semiconductor die
in the embedded die panel. The unit-specific pattern as a
fan-out structure disposed over the semiconductor die,
over the encapsulant, and coupled to the copper
columns. A fan-in redistribution layer (RDL) can extend
over the active surface of each semiconductor die such
that the copper columns formed over the fan-in RDLs.
The unit-specific pattern can be directly coupled to the
copper columns.



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