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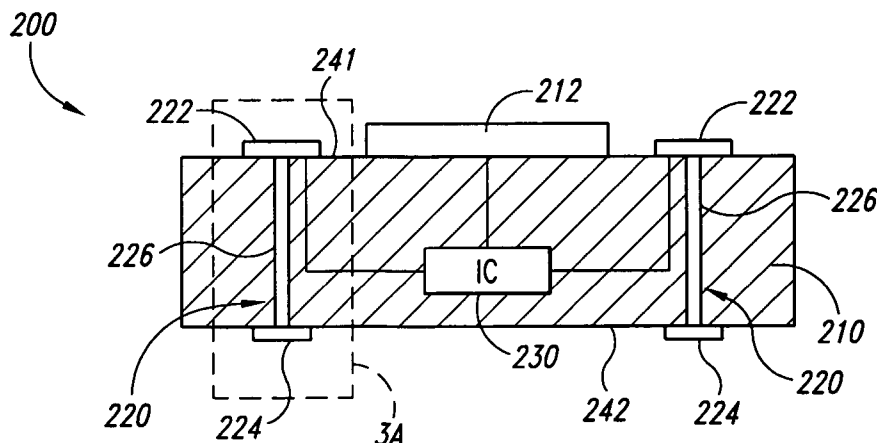
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(54) Title: **PACKAGED MICROELECTRONIC IMAGERS AND METHODS OF PACKAGING MICROELECTRONIC IM-
AGERS**



(57) Abstract: Microelectronic imagers, methods for packaging microelectronic imagers, and methods for forming electrically conductive through-wafer interconnects in microelectronic imagers are disclosed herein. In one embodiment, a microelectronic imaging die can include a microelectronic substrate, an integrated circuit, and an image sensor electrically coupled to the integrated circuit. A bond-pad is carried by the substrate and electrically coupled to the integrated circuit. An electrically

conductive through-wafer interconnect extends through the substrate and is in contact with the bond-pad. The interconnect can include a passage extending completely through the substrate and the bond-pad, a dielectric liner deposited into the passage and in contact with the substrate, first and second conductive layers deposited onto at least a portion of the dielectric liner, and a conductive fill material deposited into the passage over at least a portion of the second conductive layer and electrically coupled to the bond-pad.