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TEOH et al.(10) **Pub. No.: US 2023/0230903 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **SEMICONDUCTOR CHIP, CHIP SYSTEM,
METHOD OF FORMING A
SEMICONDUCTOR CHIP, AND METHOD OF
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ABSTRACT

A semiconductor chip is provided. The semiconductor chip may include a front side including a control chip contact and a first controlled chip contact, a back side including a second controlled chip contact, a backside metallization formed over the back side in contact with the second controlled chip contact, and a stop region extending at least partially along an outer edge of the back side between a contact portion of the backside metallization and the outer edge of the back side. The contact portion is configured to be attached to an electrically conductive structure by a die attach material, a surface of the stop region is recessed with respect to a surface of the contact portion, and/or the surface of the stop region has a lower wettability with respect to the die attach material than the contact portion.

