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(54) **SEMICONDUCTOR DEVICE HAVING A REDISTRIBUTION BONDING INTERCONNECTION, A METHOD OF MANUFACTURING THE SEMICONDUCTOR DEVICE, AND A CHIP STACK PACKAGE INCLUDING THE SEMICONDUCTOR DEVICE**

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(71) Applicant: **SK hynix Inc.**, Icheon-si Gyeonggi-do (KR)

(57)

ABSTRACT

(72) Inventors: **Si Yun KIM**, Icheon-si Gyeonggi-do (KR); **Kang Hun KIM**, Icheon-si Gyeonggi-do (KR); **Jun Yong SONG**, Icheon-si Gyeonggi-do (KR)

A semiconductor device includes a chip body; a circuit layer over the chip body; an upper insulating layer over the circuit layer; a chip metal layer over the upper insulating layer, the chip metal layer including a pad portion; a passivation layer over the chip metal layer; a lower redistribution insulating layer over the passivation layer, the pad portion of the chip metal layer left exposed by the passivation layer and the lower redistribution insulating layer; a redistribution bonding interconnection over the lower redistribution insulating layer; and an upper redistribution insulating layer over the lower redistribution insulating layer. The redistribution bonding interconnection includes a pad connection portion electrically connected to the pad portion of the chip metal layer; a horizontal extension portion extending from the pad connection portion to a side surface of the chip body; a vertical extension portion disposed over the side surface of the chip body, the vertical extension portion extending downward from a side end portion of the horizontal extension portion; and a bonding portion disposed over the side surface of the chip body. The bonding portion is positioned at a lower end portion of the vertical extension portion.

(73) Assignee: **SK hynix Inc.**, Icheon-si Gyeonggi-do (KR)

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