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CHEN et al.(10) **Pub. No.: US 2024/0222959 A1**(43) **Pub. Date: Jul. 4, 2024**(54) **ELECTROSTATIC DISCHARGE
PROTECTION DEVICE**(52) **U.S. Cl.**CPC *H02H 9/005* (2013.01); *H02H 9/04*
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ABSTRACT(72) Inventors: **Ke-Yuan CHEN**, New Taipei City
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An electrostatic discharge protection device is provided. The electrostatic discharge protection device includes first and second N-type and P-type and third P-type doped regions in the first and second N-type well regions in a P-type semiconductor substrate. First and second P-type well regions are in the first N-type well region. Third N-type, fourth P-type and N-type and fifth P-type doped regions are in the first and second P-type well regions. Fifth N-type and sixth P-type doped regions are in the third P-type well region in the second N-type well region. The first and second N-type doped regions are directly electrically connected to the fifth and sixth P-type doped regions, respectively. The first P-type and fifth N-type, the second P-type and third N-type, and the third P-type doped region and the fourth N-type and P-type doped regions are electrically connected to input/output, power supply and ground terminals.

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