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(19) **United States**(12) **Patent Application Publication**
STANZIONE et al.(10) **Pub. No.: US 2024/0178705 A1**(43) **Pub. Date: May 30, 2024**(54) **RECEIVER CIRCUITRY AND A METHOD
FOR RECEIVING POWER THROUGH
WIRELESS POWER TRANSFER, AND AN
IMPLANT DEVICE**(52) **U.S. Cl.**CPC *H02J 50/80* (2016.02); *A61N 1/3787*
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ABSTRACT(72) Inventors: **Stefano STANZIONE**, Veldhoven
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A receiver circuitry for receiving power through wireless power transfer comprises: a power receiver configured to receive a power signal from a wireless power transmitter and generate an alternating current, AC, input signal (V_{AC}); a converter circuit configured to receive the AC input signal (V_{AC}) and to convert the AC input signal (V_{AC}) to a direct current, DC, output signal (V_{OUT}); a control unit configured to control at least one parameter of the converter circuit for controlling efficiency of power transfer; a detector configured to generate a measurement signal (V_{peak}) representing available power of the AC input signal (V_{AC}); wherein the control unit is configured to receive the measurement signal from the detector and to control the at least one parameter based on the measurement signal for feedforward control of the at least one parameter.

