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LO VERDE et al.(10) **Pub. No.: US 2022/0360262 A1**(43) **Pub. Date: Nov. 10, 2022**(54) **FIELD-EFFECT TRANSISTOR (FET) BASED
SYNCHRONOUS RECTIFIER FOR
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ABSTRACT

A field-effect transistor (FET) based synchronous rectifier for emulating a diode, comprising: a first terminal (20) and a second terminal (30); a first FET (M1) and a second ELT (M2), wherein the second FET (M2) is adapted to control operation of the first FET (M1) to thereby allow unidirectional current flow when the two terminals (20, 30) are connected with an external circuit; and wherein the FET based synchronous rectifier comprises a fully integrated single-chip device (10) adapted to emulate a diode.

