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FANG et al.(10) **Pub. No.: US 2023/0230740 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **ELECTRONIC LOCK**(52) **U.S. Cl.**(71) Applicant: **TONG LUNG METAL INDUSTRY CO., LTD.**, Chiayi County (TW)CPC **H01F 7/081** (2013.01); **H03K 17/9618** (2013.01); **G06F 3/016** (2013.01)(72) Inventors: **Chun-Yi FANG**, Yunlin County (TW);
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(57)

ABSTRACT

An electronic lock capable of offering haptic feedback includes an input panel, a circuit board, at least one inductor member, at least one magnetic member, and at least one diaphragm that abuts against the circuit board. The at least one inductor member is electrically coupled to the circuit board, is connected to the at least one diaphragm, and is adjacent to the at least one magnetic member. When the input panel is pushed toward the circuit board, the circuit board and the at least one inductor member are conducted, and the circuit board alternately distributes electric currents in different directions to the at least one inductor member such that the at least one magnetic member alternately attracts and pushes the at least one inductor member, thereby urging the at least one diaphragm to vibrate upon movement of the at least one inductor member.

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