

Title (en)

SIGNAL ENTRY APPARATUS FOR ELECTRONIC DEVICE BASED ON MECHANICAL GEAR LINKAGE

Title (de)

SIGNALEINGABEVORRICHTUNG FÜR ELEKTRONISCHE VORRICHTUNG AUF DER BASIS EINER MECHANISCHEN GETRIEBEVERBINDUNG

Title (fr)

APPAREIL D'ENTRÉE DE SIGNAL POUR DISPOSITIF ÉLECTRONIQUE BASÉ SUR UNE LIAISON D'ENGRENAGE MÉCANIQUE

Publication

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Application

EP 22217003 A 20221228

Priority

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Abstract (en)

The present invention is applicable to the technical field of electronic devices, and provides a signal entry apparatus for an electronic device based on mechanical gear linkage, which is applied to an electronic device, the signal entry apparatus comprising: a rotating disk mounted on a bottom shell of the electronic device; a transmission mechanism arranged inside the bottom shell and rotatably connected to the rotating disk; and an encoder connected to the transmission mechanism, wherein the encoder converts a mechanical movement characteristic signal generated by the transmission mechanism into an electrical signal, which electrical signal is transmitted through a circuit to a circuit board arranged inside the bottom shell. Different electrical signals are generated from the mechanical information generated by the transmission mechanism and are transmitted to the circuit board, which can expand the way of information entry and improve the amount of information during information entry. The circuit board performs a corresponding operation based on the corresponding information, such that more characteristic signals can be encoded to better complete the information entry of the electronic device, improving the operability of the electronic device.

IPC 8 full level

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Citation (search report)

- [IA] CH 713251 A2 20180629 - ETA SA MFT HORLOGERE SUISSE [CH]
- [A] WO 2018010237 A1 20180118 - ZTE CORP [CN]
- [A] KR 20080019921 A 20080305 - LG ELECTRONICS INC [KR]
- [A] US 3280290 A 19661018 - DELTOER MARCEL H
- [A] US 2018307333 A1 20181025 - LIM CHANG-OK [KR], et al
- [A] KERBER FREDERIC FREDERIC KERBER@DFKI DE ET AL: "Investigating current techniques for opposite-hand smartwatch interaction", PROCEEDINGS OF THE 2017 ACM ON CONFERENCE ON INFORMATION AND KNOWLEDGE MANAGEMENT, ACMPUB27, NEW YORK, NY, USA, 4 September 2017 (2017-09-04), pages 1 - 12, XP058541663, ISBN: 978-1-4503-5586-5, DOI: 10.1145/3098279.3098542

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