Title (en)

Opening-closing device with lock

Title (de)

Öffnungs- und Schliessvorrichtung mit einer Verriegelungseinrichtung

Title (fr)

Dispositif d'ouverture et de fermeture avec un dispositif de verrouillage

Publication

EP 1721802 B1 20100310 (EN)

Application

EP 06113884 A 20060512

Priority

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Abstract (en)

[origin: EP1721802A1] The invention provides a simple and compact construction in an opening-closing device with a lock for also performing a closing lock by power of an actuator for opening and closing a sliding door (11). Further, it is prevented that the lock is performed before reaching a full closing position and the lock is unintentionally released at a breaking time of the actuator. Therefore, the invention has an unillustrated actuator as an opening-closing driving source of sliding doors able to be reciprocated, a planetary gear mechanism (20) for inputting driving force of this accuator thereto, and a lock mechanism (30) able to lock the sliding doors in a full closing position. When the sliding doors are located in positions except for the full closing position, the power of the actuator is distributed to a pinion of a rack and pinion mechanism through the planetary gear mechanism, and operates the sliding doors. In contrast to this, when the sliding doors are located in the full closing position, the power of the actuator is distributed to a lock plate (33) for switching of locked state/lock releasing state of the lock mechanism. Further, when the sliding doors are located in the positions except for the full closing position, a movement of the lock plate is prevented. In contrast to this, when the sliding doors are located in the full closing position, the movement of the lock plate is allowed.

IPC 8 full level

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CPC (source: EP KR US)

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US9316030B2; US9403422B2; CN103781982A; AT505923B1; US11448001B2; US9759004B2; US8517433B2; WO2011048391A1; WO2011159249A1; WO2019177547A1; US9273499B2; US9797171B2

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