

Title (en)
A LOCK

Title (de)
SCHLOSS

Title (fr)
VERROU

Publication
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Application
EP 17163429 A 20170328

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• EP 16168057 A 20160503
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Abstract (en)

The present invention provides a lock (100) comprising: a housing having a front section comprising a plurality of apertures therethrough; a plurality of buttons (111) disposed through the apertures in the front section of the housing, each button (111) having an axis along which each of the buttons may be axially pressed between an unpressed position and a pressed position; a biasing member (113) associated with each of the plurality of buttons (111), configured to bias each button (111) towards the unpressed position; a plurality of spools (122), each spool (122) comprising a plurality of circumferential grooves (123), each circumferential groove (123) having a notch (124) extending over a portion of the circumferential groove, wherein each notch (124) on a given spool (122) is angularly displaced relative to each of the other notches on that spool, the circumferential grooves (123) being parallel and separated spaced apart at a groove spacing from each other; a plurality of legs (116b), each leg (116b) in communication with one of the buttons (111), wherein each leg (116b) is arranged to contact one of the circumferential grooves (123) of one of the spools (122); a locking plate (120) disposed within the housing, the locking plate (120) having a plurality of apertures, each aperture arranged to receive one of the spools (122) therethrough; and an actuator (114) associated with the locking plate (120) and a latch (117), wherein the actuator (114) is configured to move the locking plate (120); wherein pressing one of the buttons (111) causes the leg (116b) in communication with the button (111) to translate the corresponding spool (122) by one groove spacing, with releasing the button (111) causing the leg (116b) to engage an adjacent groove (123); wherein the translation of each spool (122) causes a differently rotationally oriented notch (124) to be adjacent to the locking plate (120), with the locking plate (120) only being able to move into an unlocked position, when driven by the actuator (120), thereby disengaging the latch (117) and unlocking the lock, if all of the notches (124) which are adjacent to the locking plate (120) are in a unlocked rotational orientation.

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Citation (applicant)
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DOCDB simple family (application)
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