

Title (en)
PNEUMATIC DOOR ASSIST SYSTEM WITH LOCK

Title (de)
PNEUMATISCHES TÜRUNTERSTÜTZUNGSSYSTEM MIT SCHLOSS

Title (fr)
SYSTÈME PNEUMATIQUE D'ASSISTANCE POUR PORTE AVEC VERROU

Publication
EP 2422032 A1 20120229 (EN)

Application
EP 09789606 A 20090420

Priority
US 2009041073 W 20090420

Abstract (en)
[origin: WO2010123486A1] A lock (57) for a door assist system (12) for use on a vehicle door (10) and connected to a vehicle to lock the door into an open position includes a door handle (40) having a first operable position, a second operable position and a released position, a pneumatic actuator (28) having an actuator rod (32), where the actuator rod is extendable when the door handle is in the first operable position and the actuator rod is retractable when the door handle is in the second operable position. The door assist system also includes a slide block (34) displaceable by the actuator rod of the pneumatic actuator. A lock (57) also includes a door link (54) connecting the slide block (34) to the vehicle frame. As the slide block is displaced away from the pneumatic actuator (28), the door link opens the door (10) with respect to the vehicle. The lock also includes a hydraulic locking actuator (58) with a hydraulic rod (66) extendable and retractable with the slide block (34). When the door handle (40) is in the released position, the actuator rod (32) is prevented from extension and retraction and locks the slide block (34) at the current location, preventing opening or closing of the door (10).

IPC 8 full level
E05F 15/04 (2006.01); **E05C 17/30** (2006.01)

CPC (source: EP GB)
E05C 17/305 (2013.01 - EP GB); **E05F 3/223** (2013.01 - GB); **E05F 15/00** (2013.01 - EP); **E05Y 2900/50** (2013.01 - GB); **E05F 15/75** (2015.01 - EP); **E05Y 2201/22** (2013.01 - EP); **E05Y 2201/676** (2013.01 - EP); **E05Y 2900/50** (2013.01 - EP); **E05Y 2900/504** (2013.01 - EP); **E05Y 2900/531** (2013.01 - EP)

Citation (search report)
See references of WO 2010123486A1

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WO 2010123486 A1 20101028; AU 2009344872 A1 20111013; CN 102405326 A 20120404; CN 102405326 B 20150408; EP 2422032 A1 20120229; EP 2422032 B1 20140917; GB 201113162 D0 20110914; GB 2481729 A 20120104; GB 2481729 B 20140813; IL 215502 A0 20111229; IL 215502 A 20150129; ZA 201105883 B 20120425

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