

Title (en)
STAIR ASSISTANCE DEVICE

Title (de)
TREPPENHILFEVORRICHTUNG

Title (fr)
DISPOSITIF D'ASSISTANCE D'ESCALIER

Publication
EP 3409863 A1 20181205 (EN)

Application
EP 17173841 A 20170531

Priority
EP 17173841 A 20170531

Abstract (en)
A stair assistance device includes a rail unit having a toothed rail which has a teeth row. A base movably is engaged with the toothed rail and includes a pulley unit and a brake unit. The pulley unit is movable relative to the rail unit. The brake unit includes a roller which is engaged with the teeth row. A brake member is movably engaged with or disengaged from the roller. A grip unit is movably connected to the base and drives the brake member. The grip unit includes a grip which extends outward relative to the rail unit. The users hold the grip unit to control the brake member to be disengaged from the roller. The stair assistance device moves the users by the cooperation between the roller and the teeth row.

IPC 8 full level
E04F 11/18 (2006.01); **A61H 3/00** (2006.01)

CPC (source: EP)
E04F 11/1863 (2013.01); **A61H 2003/001** (2013.01); **A61H 2201/0126** (2013.01)

Citation (search report)

- [XAI] JP 2017057592 A 20170323 - HARADA AKIRA
- [A] US 2006243112 A1 20061102 - DEBRUNNER DANIEL E [US]
- [A] DE 131511 C
- [A] CA 2151984 A1 19961217 - JANSSEN PETER [CA], et al

Cited by
CN115075488A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

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