

Title (en)
VEHICLE WITH RETRACTABLE STAIR ASSEMBLY

Title (de)
FAHRZEUG MIT EINZIEHBARER TREPPENANORDNUNG

Title (fr)
VÉHICULE COMPORTANT UN ENSEMBLE DE MARCHES ESCAMOTABLE

Publication
EP 3461713 A1 20190403 (EN)

Application
EP 17194229 A 20170929

Priority
EP 17194229 A 20170929

Abstract (en)
The invention discloses a vehicle (1) comprising a body (2) and a door assembly (20) with a door (21) hingely connected to the body (2) by at least one first hinge (22), a door frame (23), and a first horizontally extending guide unit (24). Further provided is a retractable stair assembly (100) comprising a stairway (110) with steps (112) configured to be horizontally retractable between a first position, in which the stairway (110) is provided inside the body (2) in an inverted upside-down orientation and a second position, in which the stairway (110) is provided outside the body (2) and still in the inverted upside-down position, a hand rail (120) coupled on a first end (122) to the first guide unit (25) and on an opposing second end (124) coupled to the stairway (110), a second hinge (130) provided to rotate the stairway (110) in said second position to the regular orientation.

IPC 8 full level
B61D 23/02 (2006.01); **B61C 17/04** (2006.01); **B61D 19/02** (2006.01); **B61D 25/00** (2006.01)

CPC (source: EP)
B61C 17/04 (2013.01); **B61D 19/023** (2013.01); **B61D 23/02** (2013.01); **B61D 25/00** (2013.01)

Citation (search report)

- [A] EP 1623902 A1 20060208 - KAWASAKI HEAVY IND LTD [JP]
- [A] US 2010251926 A1 20101007 - TOMADA TOKUMITSU [JP], et al
- [A] EP 0142851 A1 19850529 - KAWASAKI HEAVY IND LTD [JP]
- [A] US 4216725 A 19800812 - HALLAM KEITH J [US]

Cited by
WO2024156409A1; US10596971B2; US10759349B2; US11279290B2; US11926286B2; US11260798B2; US12090958B2; US10604077B2; US10773670B2; US10821903B2; US11173845B2; US11180100B2; US11713012B2; US11964629B2; US11999309B2

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

DOCDB simple family (publication)
EP 3461713 A1 20190403; EP 3461713 B1 20201028; ES 2847952 T3 20210804

DOCDB simple family (application)
EP 17194229 A 20170929; ES 17194229 T 20170929