Title (en)

Signalling device for displaying warnings or traffic signs, and vehicle carrying such a signalling device

Title (de)

Signalisierungsvorrichtung zur Anzeige von Warnungen oder Verkehrsschildern sowie Fahrzeug mit solch einer Signalisierungsvorrichtung

Title (fr)

Dispositif de signalisation permettant d'afficher des avertissements ou de panneaux de signalisation routière et véhicule portant un tel dispositif de signalisation

Publication

EP 2549463 B1 20180530 (EN)

Application

EP 12177528 A 20120723

Priority

NL 2007167 A 20110722

Abstract (en)

[origin: EP2549463A1] A signalling device (102) for displaying warnings or traffic signs or for other display uses, arranged for attaching on a vehicle (100) or trailer, the signalling device (102) comprising a screen (104) with a display surface for a graphical indication (132), the screen (104) extending between a lower cross beam (120) and an upper cross beam (122). The screen (104) is rollable, and the signalling device (102) comprises a pair of vertical arms connecting the lower cross beam (120) and the upper cross beam (122). The vertical arms are extendible and retractable in a vertical direction (Z), so as to alter the signalling device (102) between a collapsed state in which the screen (104) is rolled up and the display surface is hidden, and a folded out state in which the screen (104) is unfolded and the display surface is fully shown. Each vertical arm (106) comprises a lower arm segment (108) laterally pivotably interconnected with an upper arm segment (110), and wherein the vertical arm (106) is extendible and retractable between a retracted state (QO) and an extended state (Ql), wherein each vertical arm (106) is provided with a biasing mechanism (200), arranged for exerting an upward total force (Fz) in the vertical direction (Z) on the upper cross beam (122), wherein the biasing mechanisms exert a sufficiently large vertical force for counteracting the combined gravitational pull on the screen, the cross beams, and the vertical arms, and sufficiently large for lifting the upper beam with both vertical arms. The biasing mechanism (200) is provided on inner sides (220, 222) of the lower arm segment (108) and/or upper arm segment (110), the biasing mechanism (200) comprising a strain cable (202) connected to one of the lower arm segment (108) and the upper arm segment (110), and comprising a gas spring (208) in the other one of the lower arm segment (108) and the upper arm segment (110), the gas spring (208) being arranged for exerting a tensile force on the strain cable (202), thereby forcing the vertical arm (106) in the extended state (Q 1).

IPC 8 full level

G09F 11/30 (2006.01); **E01F 9/662** (2016.01); **G09F 15/00** (2006.01); **G09F 21/04** (2006.01)

CPC (source: EP US)

E01F 9/662 (2016.02 - EP); **G09F 11/30** (2013.01 - EP US); **G09F 15/0025** (2013.01 - EP); **G09F 21/04** (2013.01 - EP US); **G09F 21/048** (2013.01 - EP)

Cited by

CN110541374A; CN113232860A; CN114822247A; US9860998B2; US9412287B2; US10306782B2

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

DOCDB simple family (publication)

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