

Title (en)

FILLING ADAPTER FOR FILLING VEHICLES AT ASSEMBLY LINES IN THE AUTOMOTIVE INDUSTRY

Title (de)

BEFÜLLADAPTER ZUR BEFÜLLUNG VON FAHRZEUGEN AN MONTAGELINIEN DER AUTOMOBILINDUSTRIE

Title (fr)

ADAPTATEUR D'APPROVISIONNEMENT DE VÉHICULES SUR CHÂÎNES DE MONTAGE DE L'INDUSTRIE AUTOMOBILE

Publication

**EP 4048625 A1 20220831 (DE)**

Application

**EP 20807263 A 20200924**

Priority

- DE 102019007352 A 20191021
- DE 2020000218 W 20200924

Abstract (en)

[origin: WO2021078314A1] The invention relates to a filling adapter for filling vehicles at assembly lines in the automotive industry, at which vehicles are filled with various service fluids that are supplied from filling systems via connection lines and filling adapters to circuits and containers of the vehicle. The problem addressed by the invention is that of creating a mechanical clamping element for a filling adapter of this kind that has a lower mechanical load for the filling port than the clamping claws or balls commonly used to date. This problem is solved in that the clamping element (2) has a semi-circular contour with a cross section that, starting from a lower and flat base surface (21), transitions upwards into two side surfaces (22; 23) which are arranged at a right angle to the base surface (21) and extend parallel to one another, wherein the two side surfaces (22; 23) each transition, at their end section arranged opposite the base surface (21), into an actuation surface (24; 25) that extends at an angle upwards and inwards.

IPC 8 full level

**B67D 7/02** (2010.01); **B60H 1/00** (2006.01); **B67D 7/04** (2010.01); **B67D 7/06** (2010.01); **B67D 7/34** (2010.01); **B67D 7/42** (2010.01); **F25B 45/00** (2006.01)

CPC (source: EP US)

**B60H 1/00585** (2013.01 - US); **B67D 7/02** (2013.01 - EP); **B67D 7/0288** (2013.01 - US); **B67D 7/0401** (2013.01 - EP); **B67D 7/06** (2013.01 - EP); **B67D 7/344** (2013.01 - EP); **B67D 7/42** (2013.01 - EP US); **B67D 7/428** (2013.01 - EP); **F01P 11/0204** (2013.01 - EP); **F25B 45/00** (2013.01 - EP); **B60H 1/00585** (2013.01 - EP); **B67D 2007/0419** (2013.01 - EP); **B67D 2210/0006** (2013.01 - EP); **F25B 2345/006** (2013.01 - EP)

Citation (search report)

See references of WO 2021078314A1

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)

**DE 102019007352 A1 20210422**; BR 112022007496 A2 20220712; CN 114981202 A 20220830; EP 4048625 A1 20220831; MX 2022004723 A 20220513; US 11873209 B2 20240116; US 2022388833 A1 20221208; WO 2021078314 A1 20210429; WO 2021078314 A4 20210617; ZA 202204376 B 20230628

DOCDB simple family (application)

**DE 102019007352 A 20191021**; BR 112022007496 A 20200924; CN 202080073556 A 20200924; DE 2020000218 W 20200924; EP 20807263 A 20200924; MX 2022004723 A 20200924; US 202017770268 A 20200924; ZA 202204376 A 20220419