

Title (en)

CAPLESS CLOSURE ASSEMBLY FOR FUEL-TANK FILLER PIPE

Title (de)

KAPPENLOSE VERSCHLUSSVORRICHTUNG FÜR DEN EINFÜLLSTUTZEN EINES KRAFTSTOFFTANKS

Title (fr)

ENSEMBLE DE FERMETURE SANS BOUCHON POUR GOULOT DE REMPLISSAGE DE RÉSERVOIR DE CARBURANT

Publication

EP 3969314 A4 20240124 (EN)

Application

EP 20806047 A 20200508

Priority

- US 201962847499 P 20190514
- US 201916514037 A 20190717
- US 201962878016 P 20190724
- US 201916599579 A 20191011
- US 201916701911 A 20191203
- US 202016775736 A 20200129
- US 2020032204 W 20200508

Abstract (en)

[origin: WO20231850A1] A capless filler pipe closure is provided for a tank filler pipe. The capless closure permits a fuel pump nozzle to be inserted into the tank filler pipe without first removing a fuel cap from the outer end of the tank filler pipe.

IPC 8 full level

B60K 15/04 (2006.01); **B60K 15/03** (2006.01)

CPC (source: CN EP)

B60K 15/035 (2013.01 - EP); **B60K 15/04** (2013.01 - CN EP); **B60K 2015/03296** (2013.01 - EP); **B60K 2015/03547** (2013.01 - EP); **B60K 2015/03552** (2013.01 - EP); **B60K 2015/0461** (2013.01 - CN EP)

Citation (search report)

- [XII] US 2016009173 A1 20160114 - SPERANDO STEPHEN M [US], et al
- [XII] US 2005155671 A1 20050721 - MCCLUNG CHAD A [US], et al
- [XII] US 2015158379 A1 20150611 - STANCU SORIN [US], et al
- [XII] US 2013213963 A1 20130822 - CHRETIEN PAUL [US], et al
- [A] US 5732840 A 19980331 - FOLTZ DEAN C [US]
- [A] US 2014096835 A1 20140410 - YAGER JEFF [CA], et al
- See also references of WO 2020231850A1

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)

WO 2020231850 A1 20201119; CN 114007886 A 20220201; CN 114007886 B 20230908; CN 114025981 A 20220208; CN 114025981 B 20240206; CN 114025982 A 20220208; EP 3969313 A1 20220323; EP 3969313 A4 20240619; EP 3969314 A1 20220323; EP 3969314 A4 20240124; EP 3969315 A1 20220323; EP 3969315 A4 20240124; WO 2020231851 A1 20201119; WO 2020231854 A1 20201119

DOCDB simple family (application)

US 2020032204 W 20200508; CN 202080035925 A 20200508; CN 202080035955 A 20200508; CN 202080036456 A 20200508; EP 20805365 A 20200508; EP 20806047 A 20200508; EP 20806677 A 20200508; US 2020032205 W 20200508; US 2020032209 W 20200508