

Title (en)  
ULTRA-HIGH PRESSURE GENERATOR

Title (de)  
ULTRAHOCHDRUCKGENERATOR

Title (fr)  
GÉNÉRATEUR À ULTRA HAUTE PRESSION

Publication  
**EP 2998579 B1 20200506 (EN)**

Application  
**EP 15183740 A 20150903**

Priority  
JP 2014190725 A 20140919

Abstract (en)  
[origin: EP2998579A2] An ultra-high pressure generator (70) includes: an intensifier (40) that discharges pressurized fluid (F2) and has a double-acting drive cylinder (44) formed to have a first chamber (41) and a second chamber (42) which are delimited by a piston (43) driven by a working medium (F1), high pressure cylinders (451,452) which discharge the pressurized fluid (F2), and plungers (461,462) which reciprocate with the piston (43) in the high pressure cylinders (461,462); a closed-circuit working medium pump (11) having a first port (111) and a second port (112) as suction/discharge ports for the working medium (F1) ; a drive source (12) that drives the closed-circuit working medium pump (11) ; a first working medium channel (32) that communicates the first chamber (41) with the first port (111) ; and a second working medium channel (33) that communicates the second chamber (42) with the second port (112), wherein the closed-circuit working medium pump (11) sucks/discharges the working medium (F1) from/to the first and second chambers (41,42) respectively via the first and second ports (111,112) to drive the intensifier (40).

IPC 8 full level  
**F04B 1/29** (2020.01); **B26F 3/00** (2006.01); **F04B 1/30** (2020.01); **F04B 1/32** (2020.01); **F04B 9/08** (2006.01); **F04B 9/115** (2006.01); **F04B 23/06** (2006.01)

CPC (source: EP US)  
**B26F 3/004** (2013.01 - EP US); **F04B 1/2078** (2013.01 - US); **F04B 1/295** (2013.01 - EP US); **F04B 1/306** (2013.01 - EP US); **F04B 1/324** (2013.01 - EP US); **F04B 9/08** (2013.01 - EP US); **F04B 9/115** (2013.01 - EP US); **F04B 23/06** (2013.01 - EP US)

Citation (examination)  
JP 3395122 B2 20030407

Cited by  
EP3147501A1; US10352309B2; US10422326B2; DE102022209605B4

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)  
**EP 2998579 A2 20160323**; **EP 2998579 A3 20160330**; **EP 2998579 B1 20200506**; JP 2016061249 A 20160425; JP 6371653 B2 20180808; US 2016084241 A1 20160324

DOCDB simple family (application)  
**EP 15183740 A 20150903**; JP 2014190725 A 20140919; US 201514842987 A 20150902