

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)

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Cited by
EP3147501A1; US10352309B2; US10422326B2; DE102022209605B4

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