

Title (en)
Switchgear for high pressure environments

Title (de)
Schaltvorrichtung für Hochdruckumgebungen

Title (fr)
Appareillage de commutation dans des environnements à forte pression

Publication
EP 1942514 A1 20080709 (EN)

Application
EP 07100125 A 20070104

Priority
EP 07100125 A 20070104

Abstract (en)
Vacuum circuit breaker assembly with a housing (11, 12, 13) in which a vacuum circuit breaker (15) is accommodated. The housing (11, 12, 13) is fluid tight and arranged to maintain a pressure inside the housing (11, 12, 13) at a predetermined level which is independent of a pressure outside the housing (11, 12, 13). The vacuum circuit breaker assembly (10) may be used in a switchgear assembly with an external housing (25, 35). The external housing (25, 35) has an inner space (31) sealed from an external environment (30), in which the inner space (31) is filled with a substantially non-compressible material such that, in operation, the pressure in the inner space (31) is substantially equal to the pressure of the external environment (30). The switchgear assembly may be advantageously used in sub sea or deep sea environments.

IPC 8 full level
H01H 33/66 (2006.01); **H01B 7/14** (2006.01); **H01H 9/04** (2006.01); **H02B 13/00** (2006.01); **H02G 15/14** (2006.01)

CPC (source: EP)
H01H 9/04 (2013.01); **H01H 33/666** (2013.01); **H01H 2033/024** (2013.01)

Citation (search report)
• [XY] US 4785139 A 19881115 - LYNCH JOHN F [US], et al
• [XA] US 2782249 A 19570219 - MARCEL MARTIN PAUL
• [X] US 2003198027 A1 20031023 - TAKEDA TAIICHI [JP], et al
• [X] EP 0466048 A2 19920115 - SACHSENWERK LICHT & KRAFT AG [DE]
• [X] DE 3529386 A1 19870226 - CALOR EMAG ELEKTRIZITAETS AG [DE]
• [XY] LU S ET AL: "NEPTUNE Power System: Startup Power Supply for 10 kV to 400 V Dc-Dc Converters", APPLIED POWER ELECTRONICS CONFERENCE AND EXPOSITION, 2006. APEC '06. TWENTY-FIRST ANNUAL IEEE MARCH 19, 2006, PISCATAWAY, NJ, USA, IEEE, 19 March 2006 (2006-03-19), pages 1385 - 1389, XP010910126, ISBN: 0-7803-9547-6

Cited by
EP2824684A1; EP2876660A1; EP3182438A1; EP3035353A1; CN102684100A; EP3018683A1; CN105900203A; EP3182539A1; EP3179583A1; CN106876210A; AU2016266018B2; EP3107163A1; AU2016280765B2; US10014140B2; US9530595B2; US10643814B2; US10109445B2; EP3182436A1; WO2016202932A1; WO2015028141A1; WO2018134101A1; WO2015028140A1; WO2016070996A1; US10770871B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 1942514 A1 20080709; EP 2108184 A1 20091014; EP 2108184 B1 20160824; PL 2108184 T3 20170831; WO 2008082303 A1 20080710

DOCDB simple family (application)
EP 07100125 A 20070104; EP 08705073 A 20080104; NL 2008050004 W 20080104; PL 08705073 T 20080104