

## Title (en)

HIGH VOLTAGE OUTLET STRUCTURE OF ULTRA-HIGH VOLTAGE SHUNT REACTOR

## Title (de)

HOCHSPANNUNGSAusgangsstruktur einer Drosselspule mit UltraHoher Spannung

## Title (fr)

STRUCTURE DE SORTIE HAUTE TENSION DE RÉACTEUR EN DÉRIVATION ULTRA-HAUTE TENSION

## Publication

**EP 3319097 A4 20180725 (EN)**

## Application

**EP 16816910 A 20160120**

## Priority

- CN 201510379152 A 20150701
- CN 2016071448 W 20160120

## Abstract (en)

[origin: EP3319097A1] A high voltage outlet structure of an ultra-high voltage shunt reactor comprises a voltage sharing pipe (1) and a voltage sharing ball (2) connected to the tail end of the voltage sharing pipe. The high voltage outlet structure of an ultra-high voltage shunt reactor further comprises an insulating paper cylinder (3) on the outer side of the voltage sharing ball, a ©-type paperboard (4) on the outer side of the insulating paper cylinder, and a lead supporting structure (5). Three layers of insulating paper pulp (2a) and two layers of supporting strips (2b) are disposed on the outer side of the voltage sharing ball at intervals. The insulating paper cylinder is mounted below an ascending seat (8), and an opening (9) is provided below the insulating paper cylinder. Two ends of the ©-type paperboard are fixed to a tank wall of an oil tank (12). The lead supporting structure clamps the voltage sharing pipe by arranging grooving paperboards (5a) in a staggered mode. A thick paperboard (5b) configured to fix the grooving paperboards is disposed below the grooving paperboards. The lower part of the thick paperboard is supported by an insulating conductor grip (5c). The high voltage outlet structure of an ultra-high voltage shunt reactor guarantees electrical strength and reliable insulation of outlet of 1100kilovolt, and also guarantees mounting of the outlet structure and a sleeve on an oil tank body, thereby avoiding shearing action of a high voltage ascending seat on the oil tank body, improving the shock resistance of the ultra-high voltage shunt reactor, and guaranteeing long-term safe running of the reactor.

## IPC 8 full level

**H01F 27/32** (2006.01); **H01F 27/04** (2006.01); **H01F 27/34** (2006.01); **H01F 27/36** (2006.01)

## CPC (source: EP US)

**H01F 27/04** (2013.01 - EP); **H01F 27/32** (2013.01 - EP); **H01F 27/324** (2013.01 - EP); **H01F 27/34** (2013.01 - EP); **H01F 27/36** (2013.01 - EP US)

## Citation (search report)

- [A] CN 101694807 A 20100414 - CHINA XD ELECTRIC CO LTD
- [A] CN 2750432 Y 20060104 - TBEA SHENYANG TRANSFORMER GROU [CN]
- [A] DE 19530163 A1 19970206 - AEG TRO TRANSFORMATOREN GMBH [DE]
- [A] CN 102930962 A 20130213 - CHANGZHOU YING ZHONG ELECTRICAL CO LTD
- [A] US 2009130871 A1 20090521 - HEINZIG PETER [DE], et al
- [A] US 2009000805 A1 20090101 - HAMMER THOMAS [DE], et al
- See references of WO 2017000545A1

## Cited by

CN112103056A; EP3723106A4

## 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)

**EP 3319097 A1 20180509; EP 3319097 A4 20180725; WO 2017000545 A1 20170105**

## DOCDB simple family (application)

**EP 16816910 A 20160120; CN 2016071448 W 20160120**