

Title (en)
METHOD AND DEVICE FOR CLEANING HIGH-VOLTAGE CARRYING INSTALLATION COMPONENT PARTS

Title (de)
REINIGUNGSVERFAHREN UND -VORRICHTUNG FÜR HOCHSPANNUNGSFÜHRENDE ANLAGENTEILE

Title (fr)
PROCEDE ET DISPOSITIF DE NETTOYAGE POUR ELEMENTS D'INSTALLATION A HAUTE TENSION

Publication
EP 1263549 A1 20021211 (DE)

Application
EP 01923519 A 20010315

Priority
• DE 0100994 W 20010315
• DE 10012426 A 20000315

Abstract (en)
[origin: US6863594B2] A cleaning method and a corresponding cleaning device offer adequate protection to individuals, devices and installations, for cleaning component parts of installations that carry an electrical high-voltage and which are not disconnected during cleaning. Towards this end, the component parts to be cleaned are subjected to the action of a two-phase particle stream (PS) consisting of a compressed gas (DGA) serving as a carrier medium and of carbon dioxide ice particles (TP) carried therein. Possible superficial accumulations of dirt are removed from the component parts by way of low-temperature embrittlement and by the kinetic energy of the impacting carbon dioxide particles. The carbon dioxide ice particles themselves sublime without leaving residues. A sufficiently safe distance of cleaning personnel from the high-voltage carrying insulation component parts is ensured by the provision of an electrically insulating distance mechanism (L, SFR) that is provided approximately in the form of a lance (L) or of a stream guided tube (SFR). A further increase in protection is offered by monitoring the quantity of moisture of compressed gas and/or ambient air, whereby the cleaning device is immediately shut off when predetermined limiting values are exceeded.

IPC 1-7
B24C 1/00; **B24C 5/02**

IPC 8 full level
B24C 1/00 (2006.01); **B24C 5/02** (2006.01)

CPC (source: EP US)
B24C 1/003 (2013.01 - EP US); **B24C 1/086** (2013.01 - EP US); **B24C 3/322** (2013.01 - EP US); **B24C 5/02** (2013.01 - EP US);
Y10T 137/0352 (2015.04 - EP US)

Cited by
CN107769051A; DE102010036295A1; US9255956B2; EP2612538B1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
US 2003104764 A1 20030605; **US 6863594 B2 20050308**; AT E246570 T1 20030815; DE 10112889 A1 20011018; DE 20104654 U1 20010913; DE 50100469 D1 20030911; EP 1263549 A1 20021211; EP 1263549 B1 20030806; ES 2204853 T3 20040501; WO 0168323 A1 20010920

DOCDB simple family (application)
US 22161702 A 20020913; AT 01923519 T 20010315; DE 0100994 W 20010315; DE 10112889 A 20010315; DE 20104654 U 20010315; DE 50100469 T 20010315; EP 01923519 A 20010315; ES 01923519 T 20010315