

Title (en)

COOLING DEVICE FOR X-RAY GENERATORS

Title (de)

KÜHLVORRICHTUNG FÜR RÖNTGENGENERATOREN

Title (fr)

DISPOSITIF DE REFROIDISSEMENT POUR GÉNÉRATEURS DE RAYONS X

Publication

EP 3593601 A1 20200115 (DE)

Application

EP 18714134 A 20180306

Priority

- DE 102017002210 A 20170308
- EP 2018055393 W 20180306

Abstract (en)

[origin: WO2018162437A1] The invention relates to a cooling device for x-ray tubes in x-ray generators, comprising a housing with a central receiving device for receiving an x-ray tube with an inlet opening for supplying a gaseous coolant, an outlet opening for discharging the gaseous coolant, and a gas-conducting channel which extends between the inlet opening and the outlet opening. The gas-conducting channel is designed to conduct the gaseous coolant directly by the high-voltage x-ray tube housing during operation. The gas-conducting channel additionally extends in a helical manner about the x-ray tubes such that the electric potential applied to the x-ray tubes drops to zero potential along the gas-conducting channel.

IPC 8 full level

H05G 1/02 (2006.01)

CPC (source: EP KR RU US)

H05G 1/025 (2013.01 - EP KR RU US); **H05G 1/04** (2013.01 - US)

Citation (search report)

See references of WO 2018162437A1

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)

WO 2018162437 A1 20180913; BR 112019016525 A2 20200331; CA 3051517 A1 20180913; CA 3051517 C 20211228; CN 110383954 A 20191025; CN 110383954 B 20230620; DE 102017002210 A1 20180913; EP 3593601 A1 20200115; JP 2020509550 A 20200326; JP 6805362 B2 20201223; KR 102335270 B1 20211203; KR 20190117666 A 20191016; MX 2019010559 A 20191024; RU 2727168 C1 20200721; US 10973111 B2 20210406; US 2020008287 A1 20200102

DOCDB simple family (application)

EP 2018055393 W 20180306; BR 112019016525 A 20180306; CA 3051517 A 20180306; CN 201880015563 A 20180306; DE 102017002210 A 20170308; EP 18714134 A 20180306; JP 2019547265 A 20180306; KR 20197027040 A 20180306; MX 2019010559 A 20180306; RU 2019130503 A 20180306; US 201816490234 A 20180306