

Title (en)

METHOD AND DEVICE FOR PRODUCING VACUUM TUBES FOR SOLAR THERMAL INSTALLATIONS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON VAKUUMRÖHREN FÜR SOLARTHERMISCHE ANLAGEN

Title (fr)

PROCÉDÉ ET DISPOSITIF PERMETTANT DE FABRIQUER DES TUBES À VIDE POUR DES INSTALLATIONS THERMO-SOLAIRES

Publication

EP 2794499 A2 20141029 (DE)

Application

EP 12829100 A 20121222

Priority

- DE 102011122324 A 20111223
- DE 2012001222 W 20121222

Abstract (en)

[origin: WO2013091611A2] The invention relates to a method and to a device for producing vacuum tubes for solar thermal installations, wherein the vacuum tube comprises an outer tube and an inner tube arranged within the outer tube, and the gap between the outer tube and the inner tube is sealed with respect to the exterior and evacuated. An outer tube (4) is coated in a first vacuum unit (1) and an inner tube (5) is coated in a second vacuum unit (2). The coated outer tube (4) and the coated inner tube (5) are assembled in a third vacuum unit (3) and fused together at the ends. The third vacuum unit is connected to the first vacuum unit (1) and to the second vacuum unit (2), such that the outer tube (4) and the inner tube (5) are not exposed to the atmosphere throughout the entire production of the vacuum tubes.

IPC 8 full level

C03B 23/09 (2006.01); **C03B 23/207** (2006.01); **C23C 14/56** (2006.01); **C23C 14/58** (2006.01); **F24J 2/48** (2006.01); **F24S 10/40** (2018.01)

CPC (source: EP US)

C03B 23/09 (2013.01 - EP US); **C03B 23/13** (2013.01 - EP US); **C03B 23/207** (2013.01 - EP US); **C03C 17/003** (2013.01 - EP US); **C23C 14/568** (2013.01 - EP US); **C23C 16/54** (2013.01 - EP US); **F24S 10/45** (2018.04 - EP US); **C03B 2225/00** (2013.01 - US); **C03C 2218/153** (2013.01 - US); **Y02E 10/44** (2013.01 - EP US)

Citation (search report)

See references of WO 2013091611A2

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

DOCDB simple family (publication)

WO 2013091611 A2 20130627; **WO 2013091611 A3 20130808**; CN 104136385 A 20141105; DE 112012005378 A5 20140904; EP 2794499 A2 20141029; US 2015000338 A1 20150101

DOCDB simple family (application)

DE 2012001222 W 20121222; CN 201280070467 A 20121222; DE 112012005378 T 20121222; EP 12829100 A 20121222; US 201214367314 A 20121222