

Title (en)
IRRADIATING DEVICE WITH A SINGLE-ENDED INFRARED EMITTER, FOR DIRECTING INFRARED RADIATION INTO A VACUUM PROCESS CHAMBER

Title (de)
BESTRAHLUNGSVORRICHTUNG MIT EINEM EINSEITIG GESOCKELTEN INFRAROTSTRAHLER, ZUR EINKOPPLUNG VON INFRAROT- STRALUNG IN EINE VAKUUM-PROZESSKAMMER

Title (fr)
DISPOSITIF AVEC UN RADIATEUR INFRAROUGE MONTÉ D'UN SEUL CÔTÉ, POUR DIRIGER DE L' INFRAROUGE DANS UNE CHAMBRE DE TRAITEMENT SOUS VIDE

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Application
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Abstract (en)
[origin: WO2016134808A1] The invention relates to an irradiating device for injecting infrared radiation into a vacuum process chamber, with a single-ended infrared emitter (1), which comprises an emitter casing tube (2) in the form of a round glass tube, one closed end of which protrudes into the vacuum process chamber, and with a vacuum feedthrough (3) for holding the emitter casing tube and leading it in a gas-tight manner through an opening in the vacuum process chamber, wherein a heating conductor in the form of a heating filament (6) and a return conductor (7) in the form of a current return are arranged in the emitter casing tube, wherein the heating conductor has in the portion of the emitter casing tube that is surrounding the vacuum feedthrough a connection element (12), which is led out from the emitter casing tube. To ensure safe operation, in particular of long IR emitters, even with a high heating output and without additional components or cooling, it is proposed according to the invention that the connection element (12) of the heating conductor is led through a piece of pipe (11) and that the return conductor has in the portion of the emitter casing tube (2) that is surrounding the vacuum feedthrough (3) a means for compensating the thermal expansion (such as a spring element (14) or a sliding bearing (15)).

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